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BOMBAY BRANCH

OF THE

ROYAL ASIATIC SOCIETY.

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RAILWAY DEPARTMENT
GOVERNMENT OF INDIA
RAILWAY BOARD

History of Indian Railways

Constructed and in progress corrected up to 31st March 1918.

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1919

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(3) History of Services of the officers of the Engineer and Superior Revenue Establishment of State Railways. Published yearly. Price Rs. 2-8-0 or 3*s.* 9*d.*

Technical papers.

(4) About 200 papers have been published by the Technical Section of the Railway Board's Office. The papers comprise :—

(*a*) Original descriptions of Railway Works in India and elsewhere.

(*b*) Reprints of articles from foreign Engineering Magazines.

(*c*) Reprints or abstracts of reports received by the Government of India on subjects connected with Railways.

A complete list of the papers can be obtained *gratis* from the Chief Engineer with the Railway Board, Simla.

The books and papers can be bought from the—

Superintendent, Government Printing, 8, Hastings Street, Calcutta.

The prices of the papers vary from Annas Four to Rupees Eight.

Preface.

For many years past a brief History of railways constructed and in progress has been included in the Administration Report on the Railways in India, but as a great deal of the information contained in it consists of standing matter relating to details of construction, contracts, etc., which is of little or no use to many of those to whom the report is supplied, and as it also appears unnecessary and inappropriate to include such information in an annual report, it has been decided by the Railway Board to omit it from future issues of the Report and to print it as a separate publication quinquennially. The present edition has been corrected up to 31st March 1918 and space has been allowed in the statements of statistics of working to admit of these being kept up to date.

For facility of reference and convenience railways in this volume have been grouped by systems.

For the purpose of recording statistics of working, the year in which any radical change was made in the physical or financial constitution of a railway, such as, in the case of companies' lines, the date of purchase by Government, or of important modifications in the contracts with the Secretary of State, has been taken as the starting point.

In the case of lines which are of secondary importance, *e.g.*, 2′ 6″ and 2′ gauge lines, Native State lines and some of the smaller metre gauge railways, statistics for the last 10 years only have been included.

Where railways have been absorbed into larger systems, the statistics of working prior to amalgamation have been omitted, as they no longer serve any useful purpose, and those for the joint concern included in the table of the joint concern from the date of absorption.

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From the year 1906-07 Interest on Debt in India has been calculated at the actual average rate for the year of interest on the mean non-specific debt of India, instead of at the fixed rates of 4 and 3½ per cent previously employed. The actual rates from 1906-07 to 1917-18 were 3·437, 3·412, 3·384, 3·384, 3·377, 3·401, 3·500, 3·388, 3·499, 3·4725, 3·2964 and 3·4730 per cent, respectively.

One effect of the change is that, in some cases, while the capital outlay on a railway at the end of 1907 was more than that at the end of 1906, the interest charge in connection therewith was less.

BENGAL-NAGPUR RAILWAY SYSTEM.

Chairman—ROBERT MILLER, ESQ.
Managing Director—SIR T. R. WYNNE, K.C.S.I., K.C.I.E.
Offices—132, Gresham House, Old Broad Street, London, E.C.
Date of registration of the Company—23rd February 1887.

Lines comprised in the system.—The Bengal-Nagpur railway system is made up of—

	Open line.	Under construction or sanctioned for construction.	Total.
	Miles.	Miles.	Miles.
(*a*) Bengal-Nagpur railway proper (5′ 6″ gauge) 1,567·09; East Coast railway, Northern section (5′ 6″ gauge)* 321·55	1,888·64	266·20	2,154·84
(*b*) Gondia-Chanda Extension, Bengal-Nagpur railway (2′ 6″ gauge)	217·25	...	217·25
(*c*) Jubbulpore-Gondia Extension, Bengal-Nagpur railway (2′ 6″ gauge)	311·81	9·01	320·82
(*d*) Mourbhanj State railway (2′ 6″ gauge)	32·41	...	32·41
(*e*) Nagpur-Chhindwara Extension, Bengal-Nagpur railway (2′ 6″ gauge)	97·20	...	97·20
(*f*) Parlakimedi Light railway (2′ 6″ gauge)	24·62	...	24·62
(*g*) Purulia-Ranchi branch, Bengal-Nagpur railway (2′ 6″ gauge)	115·30	...	115·30
(*h*) Raipur-Dhamtari branch, Bengal-Nagpur railway (2′ 6″ gauge)	56·94	...	56·94
(*i*) Tumsar-Tirodi Light railway (2′ 0″ gauge)	51·10	...	51·10
(*j*) Panposh-Raipura railway (5′ 6″ gauge)	...	14·30	14·30
(*k*) Mayurbhanj Extension railway (2′ 6″ gauge)	...	38·71	38·71
Total	2,795·27	328·22	3,123·49

Running powers—

Home line over Foreign lines :—

At Katni, East Indian railway	for passenger and goods trains	0·30
At Asansol and Katrasgarh, East Indian railway	for passenger and goods trains	1·16
At Howrah, East Indian railway, for passenger trains only		1·00
At Nagpur, Great Indian Peninsula railway		
Waltair to Vizagapatam, including wharf and swamp lines, Madras and Southern Mahratta railway (5′ 6″ gauge)	for passenger and goods trains.	0·65 4·97
Total		8·08

Foreign lines over Home line :—

Great Indian Peninsula railway, Nagpur to Itwari Bazar, 1·73 miles, for goods trains and 1·60 miles, at Katni, for passenger trains.	3·33
Total	3·33

Bengal-Nagpur railway (5′ 6″ gauge)—

The Bengal-Nagpur Railway Company was formed in 1887 and took over the Nagpur-Chhattisgarh State railway and constructed other lines, embracing in all a system of railways known as the Bengal-Nagpur railway.

Progress in opening—

Sections of railway.	Date of opening.	Miles.	Total.	Grand total.	Remarks.
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BENGAL-NAGPUR PROPER—					
Main line—					
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Damoodur to Purulia	14-12-89	44·56			
Purulia to Chakardharpore	22-1-90	72·23			
Chakardharpore to Goilkera	15-5-90	20·90			
Goilkera to Jharsuguda	1-2-91	104·92			
Jharsuguda to Raigarh	20-4-90	44·42			
Raigarh to Bilaspur	10-2-90	82·40			
Bilaspur to Raipur	10-1-89	68·52			
Raipur to Raj-Nandgaon	4-12-88	42·04			
Raj-Nandgaon to Nagpur	1880, '81 & '82†	144·92			
			629·53		† These are the dates of opening in sections of the original 3′ 3⅜″ gauge line, which was converted to the 5′ 6″ gauge and reopened on the 27th November 1888.
Branches—					
Sanctoria coal branch—					
Damoodur to the Sanctoria collieries	12-6-89	8·11			
			8·11		
Chaurashi branch—					
Ramkanali to Nodiha Colliery siding (siding No. 7)	1-2-03	8·52			
			8·52		
Sambalpur branch—					
Jharsuguda to Sambalpur	1-2-93	29·90			
			29·90		
Carried over	...	...	...	676·06	

*Transferred for working as an integral part of the Bengal-Nagpur railway from the 1st January 1901.

BENGAL-NAGPUR RAILWAY SYSTEM—*contd.*

Bengal-Nagpur railway (5′ 6″ gauge)—*contd.*

Progress in opening—*contd.*

Sections of railway.	Date of opening.	Miles.	Total.	Grand total.	Remarks.
1	2	3	4	5	6
Brought forward ...	...	...	...	676·06	
Katni branch—					
Bilaspur to Birsinghpur	1-2-91	142·32			
Birsinghpur to Umaria	11-5-90	18·46			
Umaria to Katni	2-11-86	35·88			
Katni to Marwara Junction	1-1-01	0·65			
			197·31		
Kanhan to Dattapahar	26-9-07	17·39			
			17·39		
Calcutta extension—					
Sini to Khargpur	1-6-98	100·02			
Khargpur to Khal Bridge	17-12-98	36·57			
Khal Bridge to Rajapur Khal	24-5-00	18·80			
Rajapur Khal to Howrah	14-12-00	15·31			
Fort Gloster branch 1·56, Lawrence Mill 0·83 and East Roop Narain Bank 0·81 and Kidderpore Por line 0·60	14-12-00	3·80			
Ring mill line at Fuleshwar	16-6-17	0·43			
			174·93		
Shalimar branch—					
Santragachi to Shalimar	15-3-01	3·15			
			3·15		
Cuttack extension—					
Khargpur to Balasore	17-12-98	71·86			
Balasore to Cuttack	10-1-99	110·40			
			182·26		
Jharia extension—					
Khargpur to Cossye river	20-12-99	6·40			
Right bank of the Cossye river to Midnapore	8-6-01	1·55			
Midnapore to Bhojudih	1-2-03	114·95			
Bhojudih to Gomoh	1-1-07	26·15			
Sudamdih block hut to Bhowrah block hut	17-2-14	1·72			
			150·77		
Branches and extensions on the Jharia Coal-fields—					
Bhojudih-Bhaga-Mohuda loop—					
Bhojudih to Bhaga	20-4-03	6·96			
Bhaga to Malkera	1-9-03	8·78			
Malkera to Mohuda	15-6-04	3·37			
			19·11		
Bhowra branch—	14-5-03	3·08			
			3·08		
Bhojudih-Pathardihi link	1-2-06	0·86			
	10-1-15	0·62			
			1·48		
Connection of B. N. Ry. and E. I. Ry. at Nonoodih—					
Bengal-Nagpur Railway's own line	5-3-15	0·93			
Bengal-Nagpur Railway and East Indian Railway joint line.	5-3-15	0·46			
			1·39		
Katras connections—					
Malkera to Katras	24-8-03	0·58			
Khanoodih to Katras	1-1-07	1·86			
			2·44		
Murulidih branch—					
Mohuda to Murulidih collieries	1-1-07	2·65			
			2·65		
Jamadoba loop—	16-9-03	5·42			
			5·42		
Kendua branch—	10-10-99	2·60			
			2·60		
Aldih branch—	1-2-06	2·54			
			2·54		
Vizianagram-Parvatipuram extension—					
Vizianagram to Bobbili	24-12-08	33·18			
Bobbili to Parvatipuram	8-3-09	15·20			
			48·38		
Bobbili-Salur branch—					
Bobbili to Salur	1-5-13	10·37			
			10·37		
Kalimati-Gorumahisani extension—					
Kalimati to Onlajori	1-2-11	34·12			
Onlajori to Gorumahisani	6-4-11	5·98			
			40·10		
Bokharo Ramgarh extension—					
Bengal-Nagpur Railway's own line—					
Mohuda to outersignal of Jamuniatand	27-11-13	4·18			
Bengal-Nagpur and East Indian Railways' joint line (Section I)					
Outersignal of Jamuniatand to Chandrapura	27-11-13	6·02			
Chandrapura to 1·50 miles from Chandrapura	1-4-15	1·50			
1·50 miles from Chandrapura to Bermo [Section II].	1-4-15	10·08			
			21·78		
Kalamna-Itwari-Nagpur section—					
Kalamna *vid* Itwari to Nagpur	15-3-11	3·88	3·88		
				891·03	
TOTAL OPEN MILEAGE, BENGAL-NAGPUR PROPER	...	...	...	1,567·09	

BENGAL-NAGPUR RAILWAY SYSTEM—*contd.*

Bengal-Nagpur railway (5′ 6″ gauge)—*contd.*

Progress in opening—*concld.*

Sections of railway.	Date of opening.	Miles.	Total.	Grand total.	Remarks.
1	2	3	4	5	6
Brought forward . .	...	...	...	1,567·09	
EAST COAST RAILWAY, NORTHERN SECTION—					
Main line—					
Cuttack to Bhubaneswar	1-2-97	17·13			
Bhubaneswar to Khurda Road	20-7-96	11·75			
Khurda Road to Rambha	1-3-96	61·60			
Rambha to Berhampore-Ganjam	1-9-95	29·54			
Berhampore-Ganjam to Palasa	1-4-95	45·99			
Palasa to Parlakimedi Road (Naupada)	17-12-94	15·97			
Parlakimedi Road (Naupada) to Vizianagram . .	20-7-94	72·36			
Vizianagram to Waltair	15-7-93	37·78			
Naupada salt branch	...	2·37			
			294·49		
Puri branch—					
Khurda Road to Puri	1-2-97	27·06			
			27·06		
TOTAL EAST COAST RAILWAY, NORTHERN SECTION .	...	...	...	321·55	
TOTAL OPEN MILEAGE, BENGAL-NAGPUR RAILWAY, 5′ 6″ GAUGE.	...	...	...	1,888·64	
UNDER CONSTRUCTION OR SANCTIONED FOR CONSTRUCTION—					
Baipur to Parvatipuram (sanctioned on 26th January 1906)	...	260·67			
Kandra-Gomharia Chord (sanctioned on 24th June 1914)	...	5·53			
			266·20		
				266·20	
GRAND TOTAL, BENGAL-NAGPUR, 5′ 6″ GAUGE	...	...	...	2,154·84	
DOUBLE LINE—					
BENGAL-NAGPUR PROPER—					
Howrah to Santragachi	12-12-00	3·42			
Santragachi to Bauria	17-6-02	10·80			
Bauria to Khargpur	15-3-07	55·86			
Shalimar branch	15-3-01	3·15			
Bankura to Adra	4-1-16	32·98			
TOTAL DOUBLE LINE .	...	...	106·21		

Details of construction—

Permanent-way.—The line is laid with 75-lb., 85-lb. and 90-lb. steel rails on transverse wooden, steel and cast iron pot sleepers.

Ballast.—The line is ballasted throughout with stone, except for a few miles on the Adra district (between Khargpur and Garbetta) where laterite is used.

Fencing.—The line is fenced only between Nagpur and Kamptee and at the more important stations, also at some of the station yards and first class level crossings on the Barang-Waltair section.

Curves.—On the main line there are no curves sharper than 1,000 feet radius.

Gradients.—The ruling gradient between Asansol and Nagpur, and Bilaspur and Katni is 1 in 100; between Sini and Khargpur, 1 in 125; between Khargpur and Waltair, 1 in 150; between Khargpur and Howrah, and Khurda Road and Puri, 1 in 200; and between Midnapore and Bhojudih, 1 in 200 in the down direction, and 1 in 125 in the up direction; and between Vizianagram and Parvatipuram, 1 in 125.

BENGAL-NAGPUR RAILWAY SYSTEM—*contd.*

Bengal-Nagpur railway (5′ 6″ gauge)—*contd.*

Contracts—

Dated the 9th March 1887 (called the original contract), *between the Secretary of State and the Bengal-Nagpur Railway Company*, as to taking over certain State railways and the construction of other lines, and their management, maintenance and working.

Dated the 31st December 1891 (supplemental to the contract of 1887), *between the Secretary of State and the Bengal-Nagpur Railway Company*, as to the construction and working of the Sambalpur Branch railway.

Dated the 27th June 1901 (called the Debenture contract, supplemental to the contract of 1887), *between the Secretary of State and the Bengal-Nagpur Railway Company*, as to the issue of debentures.

Dated the 23rd January 1902 (supplemental to the contract of 1887), *between the Secretary of State and the Bengal-Nagpur Railway Company*, as to the construction of certain new lines and the working of the Northern section of the East Coast railway.

Dated the 28th April 1903 (supplemental to the contract of 1887), *between the Secretary of State and the Bengal-Nagpur Railway Company*, as to the adoption of 1*s.* 4*d.* per rupee as the "prescribed" rate of exchange.

Dated the 22nd February 1910 (supplemental to the contracts of 1887, 1891, 1901, 1902 and 1903), *between the Secretary of State and the Bengal-Nagpur Railway Company*, as to the construction of certain further extensions and branch lines in connection with the Company's undertaking and to certain questions under the contract of 1902.

Dated the 5th November 1912 (supplemental to the contracts of 1887, 1891, 1901, 1902, 1903 and 1910) *between the Secretary of State and the Bengal-Nagpur Railway Company*, as to certain modifications of the original contract of 1887 as varied by the several supplemental contracts.

Dated the 4th March 1914 (supplemental to the contracts of 1887, 1891, 1901, 1902, 1903, 1910 and 1912) *between the Secretary of State and the Bengal-Nagpur Railway Company*, as to the adoption of the Government financial year for the preparation of accounts.

Main provisions of contracts—

(i) *Land.*—Provided by the Government at the cost of capital.

(ii) *Government aid.*—Guarantee of interest at 4 per cent per annum in sterling on the Company's ordinary capital of £3,000,000 up to the 31st December 1913. Thereafter on this ordinary capital and on any further ordinary capital that may be required, the guarantee to be 3½ per cent.

(iii) *Distribution of profits—*

(*A*) *Up to 31st December 1913.*—The net earnings for any complete calendar year up to December 1912, and thereafter for any complete financial year, after providing for:—

(*a*) payment to Government of interest on advances made by Government for capital expenditure on the Company's extensions and on over-drafts of capital in connection with open line capital expenditure, at 3½ per cent per annum up to and including 30th June 1909, and thereafter at 3¾ per cent per annum (except for advances of capital expenditure on the Company's old extensions, interest on which continued to be paid at 3½ per cent per annum),

(*b*) repayment of interest paid by Government to the Company for that year, and

(*c*) payment of interest on capitalized interest under clause 21 of the supplemental contract, dated 23rd January 1902,

are divided in the ratio of ¾ths to the Government and ¼th to the Company if the ordinary capital of £3,000,000 is not increased before that date. If the said capital is increased, the Company's share of surplus profits shall be increased by the fraction which shall bear to one-fourth the same proportion as the additional capital bears to the existing capital of £3,000,000.

As from 1st January 1901, interest at 3½ per cent per annum on the capital expended by the Government on the Northern section of the East Coast railway, is a charge against the net earnings of the Company's undertaking, and the ¼th share of surplus profits formerly payable to the Company is further divisible between the Government and the Company in the proportion which the gross earnings of the Northern section of the East Coast railway bear to the gross earnings of the remainder of the Company's undertaking.

(*B*) *From 1st January 1914.*—With effect from the 1st January 1914, the net earnings attributable to the two half-years of a financial year, less—

(*a*) interest (not charged to capital under the provisions of the contract of 22nd February 1910) on debentures or debenture stock of the Company,

(*b*) guaranteed interest on Company's open line capital, and

(*c*) interest at 3½ per cent on the Secretary of State's open line capital,

shall be divided between the Secretary of State and the Company in the ratio of the average amounts during the year of the Secretary of State's open line capital and the Company's open line capital, in accordance with the contract of the 5th November 1912.

BENGAL-NAGPUR RAILWAY SYSTEM—*contd.*

Bengal-Nagpur railway (5′ 6″ gauge)—*concld.*

Main provisions of contracts—*concld.*

(iv) *Rates and fares.*—The Government to authorise maximum and minimum rates, and prescribe the various classes of passengers and goods as well as the extent to which, within the maxima and minima, the Company may vary the rates in respect of distance, weight or special conditions.

(v) *Special obligations as to the conveyance of*—

(*a*) Mails, troops, police, high Government officials and Government stores.—To be conveyed on the same general conditions as those in force on State railways of the same gauge and at rates to be approved by Government.

(*b*) Government bullion and coin and the persons in charge thereof.—To be carried at special rates approved by Government.

(vi) *Power of the Government to determine contract.*—The railway and its appurtenances are declared to be absolutely the property of the Government, which may determine the contract by giving twelve months' previous notice on the 31st December 1950 or on the 31st December of any succeeding fifth year.

On the termination of the contract the Company is to hand over to the Government the railway and all its belongings of every description, and the Government are to repay the amount at par of the share capital which has been paid in by the Company.

The contract for the Sambalpur branch brings this branch within the provisions of the original contract of 9th March 1887, but provides that the Government may purchase the branch at any time after 1st January 1895, on giving twelve months' notice.

The contracts of 23rd January 1902 and 22nd February 1910 provide for the construction, maintenance and working of the new lines as part of the Company's undertaking, and are to remain in force until the original contract of 1887 shall be determined.

(vii) *Power of the Company to surrender contract.*—Nil.

(viii) *Term of contract* [*if not determined under* (vi) *or* (vii)].—None specified.

Statistics of working (Those for the periods prior to 1888 will be found in Appendix 38 to the Railway Administration Report for 1907.)—

Includes the Northern section of the late East Coast railway, the Gondia-Chanda, Jubbulpore-Gondia and Nagpur-Chhindwara extensions and Purulia-Ranchi and Raipur Dhamtari branches and Tumsar-Tirodi Light railway.

Year.	Mileage open at end of each year.	Total capital outlay, including suspense, to end of each year, i.e., outlay on (i) lines open and (ii) lines partly or wholly under construction.	Gross earnings.	Net earnings.	Percentage of net earnings on total capital outlay given in column (3).	Interest.	Company's share of surplus profits (based on terms of contract) *attributable to each year.*	Percentage of Company's share of net earnings (surplus profits *plus* guaranteed interest on share capital) on Company's capital.	Gain or loss to the State *pertaining to each year.*	Earnings per mile per week.	Proportion of expenses to earnings.
1	2	3	4	5	6	7	8	9	10	11	12
	Miles.	Rs	Rs.	Rs.		Rs.	Rs.		Rs	Rs.	
1888 .	224·50	5 23,92,291	15,83,293	5,17,461	0·99	23,62 947	...	...	—18,45,486	136	67·32
1889 .	318·18	7,08,75,456	20,40,944	4,03,160	0·57	29,96,304	...	...	—25,93,204	112	80·25
1890 .	586·01	8,14,66,762	28,64,578	5,47,463	0·67	33,88,852	...	...	—28,41,389	94	80·89
1891 .	831·58	9,08,04,164	34,57,356	26,84,453	2·96	35,05,676	...	...	—8,21,223	126	50·81
1892 .	831·58	9,56,14,736	60,83,562	30,08,166	3·05	39,05,345	...	...	—8,97,179	141	50·55
1893 .	862·33	9,80,03,424	64,17,751	32,62,220	3·33	43,97,594	...	...	—11,35,374	144	49·17
1894 .	860·88	9,81,73,789	66,00,648	32,59,414	3·32	45,83,993	...	...	—13,25,579	149	51·30
1895 .	860·38	9,88,94,777	68,74,740	35,41,444	3·58	48,56,800	...	...	—13,15,356	153	48·49
1896 .	860·88	11,05,30,319	63,68,525	29,27,869	2·65	48,27,504	...	...	—18,99,635	112	54·03
1897 .	860·88	13,04,58,784	62,00,309	29,79,559	2·28	51,35,240	...	...	—21,55,681	138	51·94
1898 .	1,067·41	14,07,03,520	68,79,193	33,63,854	2·29	54,23,186	...	...	—20,59,332	124	51·10
1899 .	1,190·16	16,65,90,365	90,73,460	47,21,811	2·83	59,75,853	...	...	—12,54,039	147	47·96
1900 .	1,284·35	17,41,74,604	1,20,75,223	77,15,050	4·43	64,90,637	1,83,591	...	+10,38,822	194	40·56
1901 .	1,609·22	21,28,65,061	1,30,77,769	61,48,048	2·89	79,88,163	...	...	—18,30,515	156	52·98
1902 .	1,602·24	23,05,09,658	1,42,18,227	69,37,742	3·01	85,44,311	...	...	—16,06,569	170	51·21
1903 .	1,815·65	24,97,58,940	1,55,47,702	70,45,255	2·82	89,66,131	...	...	—19,20,876	165	54·69
1904 .	1,965·08	26,14,35,453	1,89,12,137	95,87,326	3·67	95,41,624	...	...	+45,702	185	49·31
1905 .	1,980·47	27,33,72,570	2,44,70,900	1,34,04,052	4·90	1,00,32,318	6,67,100	...	+27,04,634	238	45·22
1906 .	1,996·50	28,49,48,592	2,60,47,181	1,41,51,252	4·97	1,03,41,779	7,80,837	...	+30,19,636	259	47·49
1907 .	2,113·35	30,91,90,534	2,89,80,537	1,48,46,149	4·80	1,08,35,545	9,21,460	...	+30,89,144	263	48·77
1908 .	2,300·86	32,30,77,888	2,71,55,950	1,14,06,971	3·52	1,12,34,518	...	...	+1,72,453	227	57·99
1909 .	2,348·63	33,91,49,381	2,87,72,437	1,31,42,676	3·88	1,16,99,565	2,93,048	...	+11,50,063	236	54·32
1910 .	2,395·39	34,75,04,066	3,08,52,807	1,50,32,327	4·33	1,20,04,393	6,23,284	...	+24,05,650	248	51·28
1911 .	2,488·92	35,59,06,842	3,39,70,044	1,68,21,823	4·73	1,22,61,552	9,63,507	6·14	+35,96,764	262	50·48
1912 .	2,489·92	36,36,14,944	4,02,62,849	2,18,48,526	6·01	1,24,78,206	20,44,679	8·54	+73,25,641	311	45·74
1st qr. of 1913.	2,489·92	36,36,24,074	1,15,26,259	59,47,752	1·61	31,56,237	5,82,674	2·29	+22,08,841	356	48·40
1913-14 .	2,673·32	38,74,52,167	4,20,59,348	2,15,05,714	5·55	1,34,01,930	14,99,335	7·20	+66,04,449	303	48·87
1914-15 .	2,670·82	40,20,55,383	4,10,00,804	2,03,23,627	5·05	1,43,12,277	8,32,616	5·35	+51,78,734	295	50·46
1915-16 .	2,683·66	40,76,70,217	4,43,73,284	2,26,25,105	5·56	1,47,79,386	10,94,706	5·93	+67,51,013	318	49·01
1916-17 .	2,738·15	40,99,06,116	5,12,28,422	2,65,92,647	6·49	1,47,55,302	15,95,201	7·04	+1,02,42,144	359	48·09
1917-18 .	2,741·00	41,38,74,577	5,63,92,542	3,01,32,863	7·28	1,53,17,608	*20,22,026	7·99	+1,27,93,229	396	46·57

* The surplus profits for the year 1917-18 were divided between Government and the Company in the proportion of Rs. 26,58,46,917 to Rs. 4,30,00,000.

BENGAL-NAGPUR RAILWAY SYSTEM—*contd.*

Gondia-Chanda Extension, Bengal-Nagpur railway (2′ 6″ gauge)—

Progress in opening—

Sections of railway.	Date of opening.	Miles.	Total.	Grand total.
1	2	3	4	5
Main line—				
Gondia to Nagbhir	10-11-08	80·67		
Nagbhir to Rajoli	1-12-10	31·66		
Rajoli to Babupeth	1-4-13	35·87		
Babupeth to Chanda Fort	20-2-16	1·07		
			149·27	
Extensions—				
Nagbhir, *vid* Itwari to Motibagh	10-11-08	65·59		
Line at Itwari	10-11-08	0·90		
	15-3-11	1·49	67·98	
TOTAL	...	...	...	217·25

Details of construction—

Permanent-way.—The line is laid with 40-lb. flat-footed steel rails on sâl sleepers.

Ballast.—The line is ballasted with stone and moorum.

Fencing.—The line is not fenced.

Curves.—The sharpest curve is of 955 feet radius.

Gradients.—The ruling gradient is 1 in 100.

Contracts—

The line forms an integral part of the Bengal-Nagpur railway and is worked under the contracts noted under Bengal-Nagpur railway (5′ 6″ gauge).

Statistics of working—

Included under Jubbulpore-Gondia Extension (2′ 6″ gauge).

ubbulpore-Gondia Extension, Bengal-Nagpur railway (2′ 6″ gauge)—

Progress in opening—

Sections of railway.	Date of opening.	Miles.	Total.	Grand total
1	2	3	4	5
Main line—				
Jubbulpore to Howbagh	15-9-05	1·00		
Howbagh to Burgi	7-4-05	16·56		
Burgi to Nainpur	5-7-04	51·00		
Nainpur to Gondia	18-4-03	73·73		
Branches—			142·29	
Mandla branch—		26·40		
Nainpur to Garha Mandla	15-2-09		26·40	
Barkuhi branch—		47·10		
Nainpur to Seoni	12-2-04	19·18		
Seoni to Chaurai	27-7-04	21·00		
Chaurai to Chhindwara	1-9-04	16·18		
Chhindwara to Khirsadoh	15-3-06	5·36		
Khirsadoh to Barkuhi	21-3-07		108·77	
Katangi branch—		28·93		
Balaghat to Katangi	1-5-13		28·93	
		5·42		
Ram Rama Branch	1-11-13		5·42	
TOTAL OPEN MILEAGE	...	...	...	
UNDER CONSTRUCTION OR SANCTIONED FOR CONSTRUCTION—				311·81
Khirsadoh to Sirgora (sanctioned on 24th June 1904)	...	8·43		
Portion of Itwari Bazar scheme	...	0·58		
			9·01	
				9·01
GRAND TOTAL	...		...	320·82

Details of construction—

Permanent-way.—The permanent-way consists of 41-lb. flat-footed steel rails on sâl sleepers.

Ballast.—The line is ballasted with stone, except between Seoni and Chhindwara where good black ballast has been used. Between Chhindwara and Barkuhi the ballast consists mainly of moorum.

Fencing.—Only important station yards are fenced.

Curves.—The sharpest curve is of 409 feet radius.

Gradients.—The ruling gradient is 1 in 80, except between Khirsadoh and Barkuhi where it is 1 in 60.

Contracts—

The line forms an integral part of the Bengal-Nagpur railway and is worked under the contracts noted under Bengal-Nagpur railway (5′ 6″ gauge).

BENGAL-NAGPUR RAILWAY SYSTEM—*contd.*

Jubbulpore-Gondia Extension, Bengal-Nagpur railway (2′ 6″ gauge)—*concld.*

Statistics of working (Those for the periods prior to 1908 will be found in Appendix 38 to the Railway Administration Report for 1907.)—

Includes the Gondia-Chanda and Nagpur-Chhindwara Extensions.

Year.	Mileage open at end of each year.	Total capital outlay, including suspense, to end of each year, *i.e.*, outlay on (i) lines open and (ii) lines partly or wholly under construction.	Gross earnings.	Net earnings.	Percentage of net earnings on total capital outlay given in column (3).	Earnings per mile per week.	Proportion of expenses to earnings.
1	2	3	4	5	6	7	8
	Miles.	Rs.	Rs.	Rs.		Rs.	
1908 .	397·67	2,36,27,804	10,91,800	3,05,552	1·29	53	72·01
1909 .	428·46	2,61,54,689	11,86,743	1,67,544	0·64	53	85·88
1910 .	458·57	2,78,45,635	14,02,244	2,90,059	1·04	59	79·31
1911 .	507·59	3,21,83,455	15,64,717	3,59,177	1·12	59	77·05
1912 .	508·66	3,47,04,985	18,00,931	5,19,768	1·50	68	71·14
1st qr. of 1913.	508·66	3,53,01,590	6,11,057	2,21,399	0·63	92	63·77
1913-14 .	624·63	3,73,01,570	23,21,318	6,11,012	1·64	71	73·68
1914-15 .	621·86	3,87,20,451	21,17,243	3,90,901	1·01	65	81·54
1915-16 .	622·87	4,02,71,995	20,52,540	1,58,457	0·39	63	92·28
1916-17 .	626·26	4,00,73,512	22,08,616	3,61,479	0·90	68	83.63
1917-18 .	626·26	4,02,00,345	25,02,110	6,20,169	1·54	77	75·21

Mourbhanj State railway (2′ 6″ gauge)—

Progress in opening—

Section of railway.	Date of opening.	Miles.	Total.
1	2	3	4
Rupsa to Baripada station	20-1-05	32·41	32·41

Details of construction—

Permanent-way.—The line is laid with 31-lb. flat-footed steel rails on sâl sleepers.

Ballast.—The line is ballasted with screened laterite, gravel and broken laterite.

Fencing.—The line is unfenced.

Curves.—The sharpest curve is of 955 feet radius.

Gradients.—The ruling gradient is 1 in 100.

Agreement—

Without date, *between the Maharaja of Mourbhanj and the Bengal-Nagpur Railway Company*, as to management, maintenance and working approved in Railway Board's letter No. 223-R.T. of the 10th March 1905.

Main provisions of agreement—

(i) *Land.*—Provided by the Mourbhanj State at the cost of capital.

(ii) *Government aid.*—The railway was constructed by the Mourbhanj State, whose property it is, and is managed, maintained, stocked and worked by the Bengal-Nagpur Railway Company as if it were part of the Company's undertaking.

(iii) *Terms of working.*— } The total amount of actual working expenses of the line, including
(iv) *Distribution of profits.*— } cost of maintenance, is deducted by the Company from the gross receipts and the balance is paid to the Maharaja of Mourbhanj at the end of each year.

(v) *Rates and fares.*—Controlled by the Company.

(vi) *Special obligations as to the conveyance of—*

(*a*) Mails, troops, police, high Government officials and Government stores.— } None specified.
(*b*) Government bullion and coin and the persons in charge thereof.— }

(vii) *Power of the Maharaja to determine agreement.*— } The agreement is terminable on 31st December
(viii) *Power of the Company to surrender agreement.*— } of any year on three months' previous notice given by either party to the other.

(ix) *Term of agreement* [*if not determined under* (vii) *or* (viii)].—Not specified.

BENGAL-NAGPUR RAILWAY SYSTEM—*contd.*

Mourbhanj State railway (2′ 6″ gauge)—*concld.*

Statistics of working (Those for the periods prior to 1908 will be found in Appendix 38 to the Railway Administration Report for 1907.)—

Year.	Mileage open at end of each year.	Total capital outlay, including suspense, to end of each year, *i.e.*, outlay on (i) lines open and (ii) lines partly or wholly under construction.	Gross earnings.	Net earnings.	Percentage of net earnings on total capital outlay given in column (3).	Earnings per mile per week.	Proportion of expenses to earnings.
1	2	3	4	5	6	7	8
	Miles.	Rs.	Rs.	Rs.		Rs.	
1908	32·41	7,18,970	50,791	28,633	3·98	30	43·62
1909	32·41	7,19,675	55,490	24,269	3·37	33	56·26
1910	32·41	7,19,735	58,333	25,256	3·51	35	56·70
1911	32·41	7,20,259	62,154	33,480	4·65	37	46·13
1912	32·41	7,20,259	51,390	22,906	3·18	30	55·42
1st qr. of 1913	32·41	7,20,259	17,566	9,985	1·39	42	43·16
1913-14	32·41	7,23,469	66,942	37,274	5·15	40	44·32
1914-15	32·41	7,24,329	54,406	24,839	3·43	32	54·35
1915-16	32·41	7,26,506	47,530	16,309	2·24	28	65·62
1916-17	32·41	7,27,298	52,357	10,357	1·42	36	80·22
1917-18	32·41	7,27,298	52,329	12,568	1·73	31	75·98

Nagpur-Chhindwara Extension, Bengal-Nagpur railway (2′ 6″ gauge)—

Progress in opening—

Sections of railway.	Date of opening.	Miles.	Total.	Grand total.
1	2	3	4	5
Main line—				
Itwari to Lodhikhora	1-1-11	42·35		
Lodhikhera to Sausar	10-5-11	7·40		
Sausar to Chhindwara	20 10-13	38·91		
			88·66	
Branches—				
Saoner to Khapa	1-1-11	4·50		
			4·50	
Katchidhana branch	20-10-13	4·04		
			4·04	
TOTAL	...	...	...	97·20

Details of construction—

Permanent-way.—The permanent-way consists of 41-lb. flat-footed steel rails on sâl sleepers.

Ballast.—Cuttings are fully ballasted and banks are being moorumed throughout.

Fencing.—The line is not fenced.

Curves.—The sharpest curve is of 636·6 feet radius.

Gradients.—The ruling gradient is 1 in 80.

Contracts—

This line forms an integral part of the Bengal-Nagpur railway and is worked under the contracts noted under Bengal-Nagpur railway (5′ 6″ gauge).

Statistics of working—

Included under Jubbulpore-Gondia Extension (2′ 6″ gauge).

Parlakimedi Light railway (2′ 6″ gauge)—

On the 20th May 1901 the Indian Railways Act, 1890 (IX of 1890), except section 135, was applied to the line. The working of this railway was taken over by the Bengal-Nagpur Railway Company from the 1st January 1902.

Progress in opening—

Section of railway.	Date of opening.	Miles.	Total.
1	2	3	4
Naupada to Parlakimedi	1-4-00	24·62	24·62

Details of construction—

Permanent-way.—The line is laid with 31-lb. flat-footed steel rails on transverse wooden sleepers.

Ballast.—The line is ballasted throughout with laterite, gravel and stone.

Fencing.—Short lengths of fencing have been provided in a few places where the railway runs in cuttings alongside the road.

Curves.—There are no curves of less than 1,000 feet radius.

Gradients.—The ruling gradient is 1 in 100.

BENGAL-NAGPUR RAILWAY SYSTEM—*contd.*

Parlakimedi Light railway (2′ 6″ gauge)—*concld.*

Agreement—

Dated the 24th January 1905, *between the Raja of Parlakimedi and the Bengal-Nagpur Railway Company*, as to management, maintenance and working.

Main provisions of agreement—

(i) *Land.*—Provided by the Raja of Parlakimedi at the cost of capital.

(ii) *Government aid.*—The railway was constructed by the Raja of Parlakimedi, whose property it is, and is managed, maintained, stocked and worked by the Bengal-Nagpur Railway Company as if it were part of the Company's undertaking.

(iii) *Terms of working.*—
(iv) *Distribution of profits.*— } The total amount of actual working expenses of the line, including cost of maintenance, is deducted by the Company from the gross receipts, and the balance is paid to the Raja of Parlakimedi.

(v) *Rates and fares.*—Controlled by the Company.

(vi) *Special obligations as to the conveyance of.*—

(*a*) Mails, troops, police, high Government officials and Government stores.—
(*b*) Government bullion and coin, and the persons in charge thereof.— } None specified.

(vii) *Power of the Raja to determine agreement.*—
(viii) *Power of the Company to surrender agreement.*— } The agreement is terminable on 31st December of any year on three months' previous notice given by either party to the other.

(ix) *Term of agreement* [*if not determined under* (vii) *or* (viii)].—None specified.

Statistics of working (Those for the periods prior to 1908 will be found in Appendix 38 to the Railway Administration Report for 1907.)—

Year.	Mileage open at end of each year.	Total capital outlay, including suspense, to end of each year, *i.e.*, outlay on (i) lines open and (ii) lines partly or wholly under construction.	Gross earnings.	Net earnings.	Percentage of net earnings on total capital outlay given in column (3).	Earnings per mile per week.	Proportion of expenses to earnings.
1	2	3	4	5	6	7	8
	Miles.	Rs.	Rs.	Rs.		Rs.	
1908	24·62	7,13,374	26,365	837	0·12	21	96·82
1909	24·62	7,16,528	25,830	6,961	0·97	20	73·05
1910	24·62	7,28,690	27,134	8,277	1·14	21	69·50
1911	24·62	7,36,061	33,186	10,374	1·41	26	68·74
1912	24·62	7,43,584	39,954	11,788	1·59	31	70·50
1st qr. of 1913	24·62	7,53,792	15,113	8,858	1·18	47	41·39
1913-14	24·62	7,54,914	50,679	18,288	2·42	40	63·91
1914-15	24·62	7,56,324	50,129	17,880	2·36	39	64·33
1915-16	24·62	7,63,417	40,735	852	0·11	32	97·91
1916-17	24·62	7,67,085	48,766	3,653	0·48	38	92·51
1917-18	24·62	7,67,321	54,493	21,184	2·76	43	61·13

Purulia-Ranchi branch, Bengal-Nagpur railway (2′ 6″ gauge)—

Progress in opening—

Sections of railway.	Date of opening.	Miles.	Total.
1	2	3	4
Purulia to Ranchi	15-11-07	72·68	
Ranchi to Lohardaga	6-10-13	42·62	
TOTAL	...	...	115·30

Details of construction—

Permanent-way.—The line is laid with 40-lb. flat-footed steel rails on transverse wooden sleepers.

Ballast.—The line is ballasted with stone and gravel.

Fencing.—Only the important level crossings have posts and chains padlocked.

Curves.—The sharpest curve is of 955 feet radius.

Gradients.—The ruling gradient is 1 in 80.

Contracts—

The line forms an integral part of the Bengal-Nagpur railway and is worked under the contracts noted under Bengal-Nagpur railway (5′ 6″ gauge).

BENGAL-NAGPUR RAILWAY SYSTEM—*contd.*

Purulia-Ranchi branch, Bengal-Nagpur railway (2′ 6″ gauge)—*concld.*

Statistics of working—

Year.	Mileage open at end of each year.	Total capital outlay, including suspense, to end of each year, *i.e.*, outlay on (i) lines open and (ii) lines partly or wholly under construction.	Gross earnings.	Net earnings.	Percentage of net earnings on total capital outlay given in column (3).	Earnings per mile per week.	Proportion of expenses to earnings.
1	2	3	4	5	6	7	8
	Miles.	Rs.	Rs.	Rs.		Rs.	
1908 . . .	72·68	41,71,748	3,43,434	2,23,979	5·37	91	33·81
1909 . . .	72·68	47,56,235	3,38,520	1,86,930	3·93	90	44·78
1910 . . .	72·68	48,51,707	3,62,940	1,88,155	3·88	96	48·14
1911 . . .	72·68	53,71,766	3,62,864	1,95,681	3·64	96	46·07
1912 . . .	72·68	60,03,137	4,69,592	2,79,732	4·66	124	40·43
1st qr. of 1913 . .	72·68	62,20,959	1,21,837	77,271	1·24	129	36·58
1913-14 . . .	115·29	67,92,815	5,06,262	2,86,043	4·21	84	43·50
1914-15 . . .	115·30	70,97,151	5,73,476	3,21,498	4·53	96	43·94
1915-16 . . .	115·30	72,26,864	5,79,880	3,02,935	4·19	97	47·76
1916-17 . . .	115·30	78,41,974	5,96,222	3,09,805	4·22	99	48·04
1917-18 . . .	115·30	73,75,423	5,54,283	2,60,843	3·54	92	52·94

Raipur-Dhamtari branch, Bengal-Nagpur railway (2′ 6″ gauge)—

Progress in opening—

Sections of railway.	Date of opening.	Miles.	Total.	Grand total.
1	2	3	4	5
Main line—				
Raipur to Kurud	10-9-00	31·50		
Kurud to Dhamtari	17-12-00	14·04		
			45·54	
Branch—				
Abhanpur to Rajim	15-10-00	11·40		
			11·40	
TOTAL .	...	...	...	56·94

Details of construction—

Permanent-way.—The line is laid with 31-lb. flat-footed steel rails on sâl sleepers.

Ballast.—Moorum or sand and stone in a few cuttings.

Fencing.—The line is unfenced.

Curves.—The sharpest curve is of 361 feet radius, at Raipur station.

Gradients.—The ruling gradient of the line is 1 in 200.

Contracts—

The line forms an integral part of the Bengal-Nagpur railway and is worked under the contracts noted under Bengal-Nagpur railway (5′ 6″ gauge).

Statistics of working (Those for the periods prior to 1908 will be found in Appendix 38 to the Railway Administration Report for 1907.)—

Year.	Mileage open at end of each year.	Total capital outlay, including suspense, to end of each year, *i.e.*, outlay on (i) lines open and (ii) lines partly or wholly under construction.	Gross earnings.	Net earnings.	Percentage of net earnings on total capital outlay given in column (3).	Earnings per mile per week.	Proportion of expenses to earnings.
1	2	3	4	5	6	7	8
	Miles.	Rs.	Rs.	Rs.		Rs.	
1908 . . .	56·94	14,18,139	1,16,387	45,966	3·24	39	60·51
1909 . . .	56·94	14,20,126	1,16,202	41,337	2·91	39	64·43
1910 . . .	56·94	14,20,126	1,22,475	53,083	3·74	41	56·66
1911 . . .	56·94	14,22,020	1,48,003	65,135	4·58	50	55·99
1912 . . .	56·94	14,79,387	1,75,687	81,031	5·48	59	53·88
1st qr. of 1913 .	56·94	14,84,100	55,565	29,583	1·99	75	46·85
1913-14 . .	56·94	14,83,688	1,96,572	1,11,930	7·54	66	43·06
1914-15 . .	56·94	14,88,663	1,91,811	1,06,506	7·15	65	44·47
1915-16 . .	56·94	14,88,376	1,66,190	64,483	4 33	56	61·20
1916-17 . .	56·94	14,92,730	1,62,427	74,877	5·02	55	53·90
1917-18 . .	56·94	14,94,933	1,44,154	56,177	3·76	49	61·03

BENGAL-NAGPUR RAILWAY SYSTEM—*concld.*

Tumsar-Tirodi Light railway (2′ 0″ gauge)—

This line was purchased by Government from the Central India Mining Company and made over to the Bengal-Nagpur Railway Company for maintenance and working as a part of their undertaking with effect from the 1st April 1916.

Progress in opening—

Section of railway.	Date of opening.	Miles.	Total.
1	2	3	4
Tumsar Road to Tirodi	1-4-16	51·10	51·10

Details of construction—

Permanent-way.—The permanent-way consists of 24 and 18-lb. flat-footed steel rails on sleepers of wood and corrugated iron.

Ballast.—The line is ballasted partly with stone and partly with moorum.

Fencing.—The line is unfenced.

Curves.—The sharpest curve has a radius of 286·5 feet.

Gradients.—The ruling gradient is 1 in 42.

Contract—

There is no separate contract for this line which is being maintained and worked as an integral part of the Company's undertaking.

Statistics of working—

Included under Bengal-Nagpur railway (5′ 6″ gauge).

Panposh-Raipura railway (5′ 6″ gauge)—

Date of registration of the Company—25th May 1917.

The construction of this line by the Bengal-Nagpur Railway Company, on behalf of the Panposh-Raipura Branch Railway Company, was sanctioned in Railway Board's letter No. 489-P.-16, dated the 10th January 1917.

Progress in opening—

Section of railway.	Date of opening.	Miles.	Total.
1	2	3	4
Panposh to Raipura (sanctioned on 10th January 1917)	...	14·30	14·30

Mayurbhanj Extension railway (2′ 6″ gauge)—

Date of registration of the Company—1915.

The construction of this line by a branch line company was sanctioned in Railway Board's letter No. $\frac{2329}{3082}$-C., dated the 11th September 1915.

Progress in opening—

Section of railway.	Date of opening.	Miles.	Total.
1	2	3	4
Baripada to Talband (sanctioned on 11th September 1915)	...	38·71	38·71

BOMBAY, BARODA AND CENTRAL INDIA RAILWAY SYSTEM.

Chairman.—MAJOR A. D. G. SHELLEY.
Secretary.—S. G. S. YOUNG, ESQ.
Offices.—Gloucester House, 110, Bishopsgate, London, E.C.
Date of registration of the former company.—1855.

The property vested in the former Bombay, Baroda and Central India Guaranteed Railway Company was purchased by the Secretary of State on the 31st December 1905, from which date all the contracts then subsisting between the Secretary of State and that Company were determined, the Company was re-constituted and the railway was worked temporarily under the terms of the provisional contract, dated the 27th December 1905, pending the execution of the new contract, dated the 8th April 1907, as from the 1st January 1906. The purchase price was fixed at the sum of £11,685,581, and the Secretary of State agreed to create and issue to the Company, on the 31st December 1905, India 3 per cent stock to the amount of £10,089,146 in satisfaction of £9,685,581, part of the purchase price, the Company raising a new stock capital of £2,000,000 being the unpaid balance of the purchase money of £11,685,581.

Lines comprised in the system.—The Bombay, Baroda and Central India railway system is made up of—

	Open line.	Under construction or sanctioned for construction.	Total.
	Miles.	Miles.	Miles.
(*a*) Bombay, Baroda and Central India railway (5′ 6″ gauge)	997·12	...	997·12
(*b*) Nagda-Ujjain railway (5′ 6″ gauge)	32·51	...	32·51
(*c*) Petlad-Cambay railway (Anand-Tarapur section) (5′ 6″ gauge)	21·42	...	21·42
(*d*) Petlad-Cambay railway (Tarapur-Cambay section) (5′ 6″ gauge)	12·36	...	12·36
(*e*) Tapti Valley railway (5′ 6″ gauge)	155·72	...	155·72
(*f*) Bombay, Baroda and Central India railway (3′ 3⅜″ gauge)	1,821·61	...	1,821·61
(*g*) Ahmedabad-Dholka railway (3′ 3⅜″ gauge)	33·54	...	33·54
(*h*) Ahmedabad-Parantij railway (3′ 3⅜″ gauge	88·70	...	88·70
(*i*) Gaekwar's Mehsana railway (3′ 3⅜″ gauge)	162·63	29·66	192·29
(*j*) Jaipur State railway (3′ 3⅜″ gauge)	108·04	70·82	178·86
(*k*) Palanpur-Deesa railway (3′ 3⅜″ gauge)	17·28	...	17·28
(*l*) Vijapur-Kalol-Kadi railway (3′ 3⅜″ gauge)	46·11	21·30	67·41
(*m*) Bilimora-Kalamba railway (2′ 6″ gauge)	34·93	17·91	52·84
(*n*) Bodeli-Chhota Udaipur railway (2′ 6″ gauge)	22·56	...	22·56
(*o*) Broach-Jambusar railway (2′ 6″ gauge)	29·69	...	29·69
(*p*) Gaekwar's Dabhoi railway (2′ 6″ gauge)	153·94	71·31	225·25
(*q*) Kosamba-Zankhvav railway (2′ 6″ gauge)	26·10	22·57	48·67
(*r*) Petlad-Vaso railway (2′ 6″ gauge)	19·25	...	19·25
(*s*) Rajpipla State railway (2′ 6″ gauge)	39·24	...	39·24
(*t*) Navsari Kamrej Light railway (2′ 6″ gauge)	...	20·00	20·00
Total	3,822·75	253·57	4,076·32

Running powers—

Home line over foreign lines :—

Dádár Junction to Carnac bridge, Great Indian Peninsula railway (for goods trains only)	4·30
Mahim to Cowari, Great Indian Peninsula railway (for passenger and goods trains)	1·78
Muttra-Delhi section of the Agra-Delhi Chord railway (for passenger and goods trains)	90·05
Total	96·13

Foreign lines over home line :—

East Indian railway, Jumna bridge to Agra Fort (for passenger trains only)	1·00
Great Indian Peninsula railway at Ujjain (for passenger and goods trains)	0·24
" " " Dádár Junction to Colába (for goods trains only)	7·25
" " " Idgah to Agra Fort (for passenger and goods trains)	1·32
Total	9·81

BOMBAY, BARODA AND CENTRAL INDIA RAILWAY SYSTEM—*cont*

Bombay, Baroda and Central India railway (5′ 6″ gauge)—

Progress in opening—

Sections of railway.	Date of opening.	Miles.	Total.	Grand total
1	2	3	4	5
Main line—				
Colába to Marine lines	18-1-70	2·00		
Marine lines to Charni Road	19-6-69	0·75		
Charni Road to Grant Road	3-9-68	0·76		
Grant Road to Bulsár	28-11-64	121·00		
Bulsár to Navsári	2-9-61	24·25		
Navsári to Sachin	20-5-61	9·25		
Sachin to Surat	18-3-61	9·00		
Surat to Amroli	19-11-60	2·25		
Amroli to Anklesvar	10-4-60	28·75		
Anklesvar to the Nerbudda	5-12-60	5·57		
Nerbudda to Broach	22-6-60			
Broach to Baroda	9-1-61	43·75		
Baroda to Dholia	22-4-62	11·25		
Dholia to Mehmadabad and Kaira Road	3-9-62	33·25		
Mehmadabad and Kaira Road to Ahmedabad	21-1-63	17·39		
Ahmedabad to Sábarmati	1-1-70	3·75		
Sábarmati to Sánand	24-5-71	13·75		
Sánand to Viramgám	30-11-71	22·98		
			350·20	
Branches and sections—				
Godhra branch—				
Ánand to Dákor	8-4-74	16·75		
Dákor to Rukhyal	6-1-75	1·75		
Rukhyal to Hungari	6-12-76	9·00		
Hungari to Sevalia	29-1-77	4·71		
Sevalia to Godhra	26-2-82	16·76		
			48·97	
Pátri branch—				
Khárághoda to Viramgám	12-5-73	22·12		
			22·12	
Godhra-Baroda chord—				
Baroda to Godhra	23-12-03	42·79		
			42·79	
Godhra-Rutlam-Nagda section—				
Godhra to Limkhera	16-1-93	25·44		
Limkhera to Dohad	7-3-94	19·55		
Dohad to Rutlam	22-10-94	70·46		
Rutlam to Nagda	11-5-96	26·04		
			141·49	
Nagda-Muttra section—				
Nágdá to Morak	15-7-07	101·56		
Morak to Kotah City	26-2-08	35·12		
Kotah City to Kotah Junction	1-5-09	3·48		
Kotah Junction to Siwai Mádhopur	1-5-09	67·38		
Siwai Mádhopur to Gangapur City	1-6-09	39·00		
Gangapur City to Hindaun City	1-10-09	26·84		
Hindaun City to Muttra Junction	15-6-09	66·02		
			* 339·40	
Agra branch—				
Bayana to Agra	1-12-13	51·04		
			51·04	
Mahim Cord Line in Mahim Yard	11-8-14	0·12	0·12	
Kotah-Baran Line in Kotah Yard	...	0·99	0·99	
TOTAL	...	...	...	997·13
QUADRUPLE LINE—				
Mahim to Bandra	1-5-17	1·00	1·00	
DOUBLE LINE—				
Colába to Marine lines	18-1-70	2·00		
Marine lines to Charni Road	19-6-69	0·75		
Charni Road to Grant Road	13-9-68	0·76		
Grant Road to Máhim	20-7-65	5·44		
Máhim to Bándra	23-2-66	*0·07		
Bándra to Santa Cruz	23-5-66	1·83		
Santa Cruz to Andheri	29-8-67	2·71		
Andheri to Bháyndar	27-4-85	13·33		
Bháyndar to Virár	1-10-85	10·34		
Virár to Pálghar	1-12-97	19·28		
Pálghar to Dáhánu Road	17-1-98	20·37		
Dáhánu Road to Gholvad	20-4-00	6·89		
Gholvad to Daman Road	18-10-00	23·19		
Daman Road to Bulsár	29-1-02	16·44		
Bulsár to Sachin	21-4-02	33·50		
Sachin to Kankra Khari	4-7-87	6·30		
Kankra Khari to Surat	5-6-68	2·70		
Surat to Utran	9-10-67	2·15		
Utran to Sáyan	25-5-98	6·40		
Sáyan to Kim	1-10-98	6·30		
Kim to Anklesvar	11-12-99	16·15		
Anklesvar to Nerbudda Bridge	7-3-13	4·17		
Broach to Miyágam	15-10-99	25·25		
Miyágám to Itola	15-9-97	7·75		
Itola to Baroda "C" cabin	7-6-95	12·07		
Baroda "C" cabin to "D" cabin	10-4-16	1·79		
Bárejadi to Ahmedabad	2-6-87	10·14		
Mahim Chord Line	11-8-14	0·12		
TOTAL DOUBLE LINE	...	...	258·19	

* Excluding the quadrupled section.

BOMBAY, BARODA AND CENTRAL INDIA RAILWAY SYSTEM—*contd.*

Bombay, Baroda and Central India railway (5′ 6″ gauge)—*contd.*

Details of construction—

Permanent-way.—The main line is laid with 69-lb. double-headed, 82-lb. bull-headed and 90-lb. flat-footed steel rails on creosoted pine, Australian and oval pot sleepers.

The branches are laid mostly with 69-lb. double-headed and 75-lb. flat-footed steel rails on oval pot and wooden sleepers. The Godhra-Rutlam-Nagda section is laid with 75-lb. flat-footed steel rails on transverse steel, deodar, creosoted pine sleepers and cast iron pots and the Nagda-Muttra section with 87-lb. and 90-lb. flat-footed steel rails on sâi, deodar, Australian wood sleepers and cast iron pots north of Nagda.

Ballast.—The line is mostly ballasted with broken stone, gravel and shingle.

Fencing.—Excepting the Pátri branch the line is fenced throughout. One hundred and thirty-seven miles of the Godhra-Rutlam-Nagda section and the station yards only on the rest of this section, are fenced. On the Nagda-Muttra section most of the station yards only are fenced.

Curves.—The sharpest curve on the main line and on the Godhra branch is of 1,500 feet radius, on the Pátri branch of 2,865 feet radius, on the Godhra-Baroda chord of 1,910 feet radius, on the Godhra-Rutlam-Nagda section of 1,000 feet radius and on the Nagda-Muttra section of 1,275 feet radius.

Gradients.—The ruling gradient on the greater part of the main line is 1 in 500, but there are short lengths of 1 in 200 at the approaches to major bridges. On the Godhra branch the ruling grade is 1 in 200, except for a short length at the Mahi low level bridge where it is 1 in 80; on the Pátri branch and the Godhra-Baroda chord it is 1 in 300, except for short lengths of 1 in 200 on the latter. The ruling gradient on the Nagda-Muttra section is 1 in 200, as also on the Godhra-Rutlam-Nagda section with short lengths of 1 in 100 and from 1 in 101 to 1 in 150 between Godhra and Jekot.

Contracts—

Dated the 8th April 1907 (called the principal contract), *between the Secretary of State and the Bombay, Baroda and Central India Railway Company*, as to the maintenance, management and working, as from the 1st January 1906, of the Bombay, Baroda and Central India railway, the Rajputana-Malwa railway and other subsidiary lines.

Dated the 15th October 1908 (called the Debenture contract, supplemental to the contract of 1907), *between the Secretary of State and the Bombay, Baroda and Central India Railway Company*, as to the issue of debentures or debenture stock of the Company.

Dated the 24th October 1913 (supplemental to the contracts of 1907 and 1908), *between the Secretary of State and the Bombay, Baroda and Central India Railway Company*, as to the continuance with further modifications, with effect from the 1st January 1912, the principal contract of the 8th April 1907 and the adoption of the Government financial year for the preparation of accounts.

Main provisions of contracts—

(i) *Land.*—Was provided by the Government free of cost to the former Company. After the 31st December 1905, the cost of land provided by the Government is debited to the appropriate capital account.

(ii) *Government aid.*—The Government guarantee to pay to the Company interest at the rate of 3 per cent per annum on its stock capital of £ 2,000,000 raised in satisfaction of the unpaid balance of the purchase money of £11,685,581, also on the amount which shall for the time being have been paid to the credit of the Secretary of State in respect of any further ordinary stock which the Company may issue with his sanction.

Capital required for the purposes of the undertaking after 31st December 1911 shall, at the option of the Secretary of State, either be advanced by him (in which case he shall be at liberty to call on the Company subsequently to raise money for its repayment), or be provided by the Company by the issue, as the Secretary of State shall decide, of further ordinary stock, or of debentures or debenture stock.

(iii) *Distribution of profits.*—From the half-yearly gross earnings of the undertaking are deducted the working expenses of the undertaking and all other charges to Revenue account properly attributable to each half-year, the remainder, together with the interest to be credited by the Secretary of State in respect of any balance of unexpended capital in his hands under clause 19 of the contract of the 24th October 1913, being the net receipts.

BOMBAY, BARODA AND CENTRAL INDIA RAILWAY SYSTEM—*contd.*

Bombay, Baroda and Central India railway (5′ 6″ gauge)—*concld.*

Main provisions of contracts—*concld.*

The net receipts of the undertaking for each half-year, after deducting payments of net earnings to subsidiary lines, allowances for rebate, direction and other deductions are applied in repayment of interest for the half-year on any debentures or debenture stock of the Company and in payment to the Secretary of State and the Company of interest at 4 per cent per annum on the Secretary of State's preferred capital and on the average amount to the credit of the Company's Capital Account. Next in making good any deficiency in the net receipts of the first half-year of any year as compared to the payment chargeable thereon and mentioned above. The surplus of the two half-years of any year is next applied in payment of interest for the year at 4 per cent on the deferred capital of the Secretary of State and the balance if any remaining is divided between the Secretary of State and the Company in proportion to the average amounts standing to the credit of the Secretary of State and the Company respectively in the Government Capital Account and the Company's Capital Account, including in the Secretary of State's Capital both his preferred and deferred capital. The interest payable by the Secretary of State under the guarantee of 3 per cent is to be deducted from the interest at 4 per cent per annum payable to the Company on the average amount to the credit of the Company's Capital Account.

(iv) *Rates and fares.*—The Government will from time to time authorize maxima and minima rates, and prescribe the several classes and descriptions of passengers and goods to which such rates shall be respectively applicable, as well as the extent to which, within the authorized maxima and minima, the Company may vary the said rates. The Railway Board may at any time require the Company to quote such rates over the undertaking for both passengers and goods to and from the western ports between Karachi and Bombay, inclusive, including a rate from stations of origin and delivery where the route is either entirely or only partly over the undertaking, so as to secure equal treatment of such ports.

(v) *Special obligations as to the conveyance of*—

(*a*) Mails, troops, high Government officials and Government stores.—To be conveyed on the same general conditions, and at rates to be approved by the Government not being less than those in force on State railways of the same gauge.

(*b*) Government bullion and coin, and the persons in charge thereof.—To be carried at special rates to be approved by the Government.

(vi) *Power of the Government to determine contract.*—Contract may be determined by Government on the 31st December 1941, or on the 31st December of any succeeding fifth year, by giving to the Company in England, 12 calendar months' previous notice.

(vii) *Power of the Company to surrender contract.*—Nil.

(viii) *Term of contract* [*if not determined under* (vii) *and* (viii)].—Not specified.

Statistics of working (Those for the periods prior to 1906 will be found in Appendix 38 of the Railway Administration Report for 1907).—

INCLUDES THE GODHRA-RUTLAM-NAGDA AND NAGDA-MUTTRA SECTIONS *from* 1912.

Year.	Mileage open at end of each year.	Total capital outlay including suspense to end of each year, *i.e.*, outlay on (i) lines open and (ii) lines partly or wholly under construction.	Gross earnings.	Net earnings.	Percentage of net earnings on total capital outlay given in column (3).	Interest.	Company's share of surplus profits (based on terms of contract) *attributable to each year.*	Percentage of Company's share of net earnings (surplus profits *plus* guaranteed interest on share capital) on Company's capital).	Gain or loss to the State *pertaining to each year.*	Earnings per mile per week.	Proportion of expenses to earnings.
1	2	3	4	5	6	7	8	9	10	11	12
	Miles.	Rs.	Rs.	Rs		Rs.	Rs.		Rs.	Rs.	
1906	504·35	12,63,16,478	1,99,81,754	1,05,39,638	8·34	72,58,353	3,95,833	...	+28,85,502	809	47·27
1907	504·35	12,96,92,431	2,10,78,442	1,18,80,851	9·16	71,98,558	4,52,599	...	+42,29,694	852	43·48
1908	504·35	13,48,94,409	2,04,40,999	97,63,713	7·24	72,93,726	1,50,000	...	+23,19,987	780	52·25
1909	504·35	14,18,69,493	2,21,36,727	1,17,55,514	8·29	75,19,552	1,52,517	...	+40,84,445	844	46·89
1910	504·35	14,32,24,042	2,40,62,075	1,24,94,573	8·72	77,49,590	4,30,787	...	+43,14,196	917	48·07
1911	504·35	14,02,98,743	2,47,34,178	1,23,43,704	8·27	78,64,428	4,42,388	4·47	+40,41,888	943	50·07
1912	945·85	21,95,74,123	3,27,92,584	1,61,93,680	7 38	99,59,957	6,58,709	5 19	+55,75,014	667	50·62
1st qr. of 1913	945·85	22,35,94,288	88,37,064	46,83,922	2·09	25,74,807	2,22,340	1·47	+18,86,775	719	47·00
1913-14.	996·23	23,56,10,283	3,60,65,069	1,83,83,393	7·80	1,10,96,208	5,41,271	5·19	+67,45,914	721	49·03
1914-15.	996·30	24,41,98,233	3,41,76,399	1,65,02,921	6·76	1,13,83,504	5,36,456	4·57	+45,82,961	660	51·71
1915-16	996·05	24,97,72,110	3,73[1]18,037	1,96,00,894	7·85	1,15,64,030	9,10,326	5·66	+71,26,538	721	47·48
1916-17	997·12	25,18,41,949	3,96,80,614	2,33,71,683	9·28	1,14,51,232	11,05,194	6·26	+1,08,15,257	765	41·10
1917-18	997·12	25,54,66,064	4,56,08,423	2,58,92,489	10·14	1,13,34,814	†12,70,777	6·78	+1,32,86,898	8·80	43·23

[1] Includes State outlay on Patri branch, *viz.*, Rs. 8,08,405.

† This figure relates to the entire system. It is made up of surplus profits for the year amounting to Rs. 8,90,377 and the excess amounting to Rs. 3,80,400. of interest at 4 per cent. per annum on the Company's preferred capital over the guaranteed interest at 3 per cent. paid to the Company by the Secretary of State, and is inclusive of interest at 4 per cent and a moiety of the share of surplus profits amounting to Rs. 1,08,355 due to Government on the advance of Rs. 20,10.000 from the 5′ 6″ gauge Provident Fund taken over by them. The surplus profits for the year were divided between the Government and the Company in the proportion of Rs. 62,51,78,709 to Rs. 3,20,10,000.

BOMBAY, BARODA AND CENTRAL INDIA RAILWAY SYSTEM—*contd.*

Nagda-Ujjain railway (5′ 6″ gauge)—

Progress in opening—

Section of railway.	Date of opening.	Miles.	Total.
1	2	3	4
Nágdá to Ujjain	15-7-96	32·51	32·51

Details of construction—

Permanent-way.—The permanent-way consists of 75-lb. flat-footed steel rails on cast iron oval pot sleepers.

Ballast.—The line is ballasted with broken stone.

Fencing.—Only station yards are fenced.

Curves.—The sharpest curve is of 1,910 feet radius.

Gradients.—The ruling gradient is 1 in 200.

Agreement and contracts—

Agreement, without date, having effect from the 15th July 1896, *between His Highness the Maharaja Scindia of Gwalior and the Bombay, Baroda and Central India Railway Company*, as to management, maintenance and working.

Contract, dated the 1st February 1901, *between the Secretary of State and the Bombay, Baroda and Central India Railway Company*, as to the revising, and extending up to the 31st December 1905, of the arrangements for working the Rajputana-Malwa railway and other lines.

Contract, dated the 8th April 1907 (called the principal contract), *between the Secretary of State and the Bombay, Baroda and Central India Railway Company*, as to the maintenance, management and working, as from the 1st January 1906, of the Bombay, Baroda and Central India railway, the Rajputana-Malwa railway and other subsidiary lines.

Main provisions of agreement and contracts—

(i) *Land.*—Provided free of cost by the Gwalior Durbar.

(ii) *Government aid.*—The line is the property of the Gwalior Durbar (which provides all funds chargeable to the capital account), and is managed, maintained, stocked and worked by the Bombay, Baroda and Central India Railway Company as part of the Company's railway system.

(iii) *Terms of working.*—
(iv) *Distribution of profits.*— } The Nágdá-Ujjain railway is debited with a share of the working expenses of the Company's railway system in proportion to the total earnings of the Nágdá-Ujjain railway in each half-year, and the balance in favour of or against the Gwalior Durbar is paid over to, or by it, as the case may be.

(v) *Rates and fares.*—To conform generally to those in force on the Godhra-Rutlam-Nagda railway, unless otherwise specially agreed between the Durbar and the Company.

(vi) *Special obligations as to the conveyance of.*—

(*a*) Mails, troops, high Government officials and Government stores.—Mails and postal officers on duty to be carried at the rates and on the conditions in force from time to time on State railways. (The agreement does not contain any provision for the carriage at special rates of troops, high Government officials and Government stores.)

(*b*) Government bullion and coin, and the persons in charge thereof.—Not specified.

(vii) *Power of the Durbar to determine agreement.*—
(viii) *Power of the Company to determine agreement.*— } The agreement may be terminated at any time on one year's notice from either party, expiring on the 30th September or 31st March in any year.

(ix) *Term of agreement* [*if not determined under* (vii) *and* (viii)].—Not specified.

BOMBAY, BARODA AND CENTRAL INDIA RAILWAY SYSTEM—*contd.*

Nagda-Ujjain railway (5′ 6″ gauge)—*concld.*

Statistics of working (Those for the periods prior to 1908 will be found in Appendix 38 to the Railway Administration Report for 1907).—

Year.	Mileage open at end of each year.	Total capital outlay, including suspense to end of each year, *i.e.*, outlay on (i) lines open, and (ii) lines partly or wholly under construction.	Gross earnings.	Net earnings.	Percentage of net earnings on total capital outlay given in column (3).	Earnings per mile per week.	Proportion of expenses to earnings.
1	2	3	4	5	6	7	8
	Miles.	Rs.	Rs.	Rs.		Rs.	
1908	34·32	22,40,441	1,95,491	83,228	3·71	109	57·43
1909	34·32	22,40,441	2,50,437	1,21,895	5·44	140	51·33
1910	34·32	22,40,600	2,59,680	1,34,098	5·98	146	48·36
1911	34·32	22,40,600	2,89,814	1,43,929	6·42	162	50·34
1912	34·32	22,40,600	3,21,131	1,64,593	7·35	180	48·75
1s qr. of 1913 . .	34·32	22,40,600	75,347	41,074	1·83	169	45·49
1913-14 . . .	34·32	22,42,194	3,26,870	1,65,627	7·39	183	49·33
1914-15 . . .	34·32	22,50,028	2,58,462	1,22,968	5·47	145	52·42
1915-16 . . .	34·32	22,53,063	3,48,441	1,86,781	8·29	195	46·40
1916-17 . . .	32·51	22,55,464	2,86,516	1,62,977	7·23	169	43·12
1917-18 . . .	32·51	22,55,464	2,61,688	1,46,039	6·47	155	44·19

Petlad-Cambay railway (Anand-Tarapur section) (5′ 6″ gauge)—

Progress in opening—

Sections of railway.	Date of opening.	Miles.	Total.
1	2	3	4
Ánand to Petlád	5-5-90	13·17	
Petlád to Tarapur	20-6-01	8·25	
TOTAL . .	...	...	21·42

Details of construction—

Permanent-way.—The permanent-way consists of 66¼-lb. flat-footed steel rails on steel sleepers from Ánand to Petlád and on creosoted pine sleepers from Petlád to Tarapur.

Ballast.—The line is ballasted with gravel.

Fencing.—Thirteen miles, between Ánand and Petlád, are fenced. The rest of the line is unfenced, except in station yards.

Curves.—The sharpest curve is of 1,433 feet radius.

Gradients.—The ruling gradient is 1 in 200.

Agreements and contract—

Agreement, without date, having effect from the 5th May 1890, *between the Government of His Highness the Maharaja Gaekwar of Baroda and the Bombay, Baroda and Central India Railway Company*, as to management, maintenance and working.

Contract, dated the 8th April 1907 (called the principal contract) *between the Secretary of State and the Bombay, Baroda and Central India Railway Company*, as to the maintenance, management and working, as from the 1st January 1906, of the Bombay, Baroda and Central India railway, the Rajputana-Malwa railway and other subsidiary lines.

Agreement, dated the 3rd March 1909, *between the Government of His Highness the Maharaja Gaekwar of Baroda and the Bombay, Baroda and Central India Railway Company*, modifying the agreement of 5th May 1890.

Agreement, dated the 16th May 1910, *between the Government of His Highness the Maharaja Gaekwar of Baroda and the Bombay, Baroda and Central India Railway Company*, modifying further the agreement of 5th May 1890.

BOMBAY, BARODA AND CENTRAL INDIA RAILWAY SYSTEM—*contd.*

Petlad-Cambay railway (Anand-Tarapur section) (5′ 6″ gauge)—*concld.*

Main provisions of agreements and contract—

(i) *Land.*—Provided free of cost by the Baroda Durbar.

(ii) *Government aid.*—The line is the property of the Baroda Durbar (which provides all funds chargeable to the capital account), and is managed, maintained, stocked and worked by the Bombay, Baroda and Central India Railway Company as part of the Company's railway system.

(iii) *Terms of working.*—
(iv) *Distribution of profits.*— } Excepting the cost of making good damages due to extraordinary casualty which is borne by the Durbar and is chargeable against capital, the Petlad railway is debited for maintenance and working expenses, including the cost of supervision and hire of rolling-stock, with the same percentage of gross earnings as may be incurred in the half-year on the 5′ 6″ and 3′ 3⅜″ gauge lines of the Bombay, Baroda and Central India railway system, and with any single item of capital expenditure not exceeding Rs. 1,000 classed as a 'Minor work,' subject to a maximum charge on such account of an amount bearing the same percentage of gross receipts as obtains for similar expenditure on the Bombay, Baroda and Central India railway. The balance in favour of or against the Baroda Durbar is paid over to, or by it, as the case may be.

(v) *Rates and fares.*—To be fixed from time to time by the Company with the approval of the Durbar, but in the absence of any special agreement between them, they are, as far as may be, to conform to those generally in force on the Bombay, Baroda and Central India railway (5′ 6″ gauge).

(vi) *Special obligations as to the conveyance of.*—

(*a*) Mails, troops, high Government officials and Government stores.—Mails and postal officers on duty to be carried at the rates and on the conditions in force from time to time on State railways in British India. (There is no provision for the carriage at special rates of troops, high Government officials and Government stores.)

(*b*) Government bullion and coin, and the persons in charge thereof.—Not specified.

(vii) *Power of the Durbar to determine agreement.*—
(viii) *Power of the Company to determine agreement.*— } Either party may at any time determine the agreement on giving 12 months' notice to the other.

(ix) *Term of agreement* [*if not determined under* (vii) *and* (viii)].—Not specified.

Statistics of working (Those for the periods prior to 1908 will be found in Appendix 38 to the Railway Administration Report for 1907).—

Year.	Mileage open at end of each year.	Total capital outlay, including suspense, to end of each year, *i.e.*, outlay on (*i*) lines open, and (*ii*) lines partly or wholly under construction.	Gross earnings.	Net earnings.	Percentage of net earnings on total capital outlay given in column (3).	Earnings per mile per week.	Proportion of expenses to earnings.
1	2	3	4	5	6	7	8
	Miles.	Rs.	Rs.	Rs.		Rs.	
1908	21·50	11,31,294	1,86,283	80,125	7·08	167	56·99
1909	21·50	11,31,692	1,88,042	90,705	8·01	168	51·76
1910	21·50	11,33,233	2,19,645	1,13,373	10·00	196	48·38
1911	21·50	11,39,458	2,39,635	1,19,183	10·46	214	50·26
1912	21·50	11,46,073	2,54,948	1,29,527	11·30	228	49·19
1st qr. of 1913	21·50	11,47,125	62,414	33,987	2·96	223	45·55
1913-14	21·50	11,50,073	2,43,277	1,21,880	10·60	218	49·90
1914-15	21·50	12,02,487	2,61,224	1,24,590	10·35	234	52·34
1915-16	21·50	12,62,474	2,78,833	1,45,392	11·52	249	47·89
1916-17	21·42	12,76,018	2,81,393	1,61,221	12·63	253	42·71
1917-18	21·42	12,84,150	2,74,851	1,53,583	11·96	247	44·12

Petlad-Cambay railway (Tarapur-Cambay section) (5′ 6″ gauge)—

Progress in opening—

Section of railway.	Date of opening.	Miles.	Total.
1	2	3	4
Tarapur to Cambay	20-6-01	12·36	12·36

BOMBAY, BARODA AND CENTRAL INDIA RAILWAY SYSTEM—*contd.*

Petlad-Cambay railway (Tarapur-Cambay section) (5′ 6″ gauge)—*concld.*

Details of construction—

Permanent-way.—The permanent-way consists of 66¼-lb. flat-footed steel rails on creosoted pine sleepers.

Ballast.—The line is ballasted with gravel.

Fencing.—Only station yards are fenced.

Curves.—The sharpest curve is of 1,910 feet radius.

Gradients.—The ruling gradient is 1 in 600, with a short length of 1 in 200 between Sayama and Cambay.

Agreements and contract—

Agreement, dated the 17th May 1902, *between the Cambay Durbar and the Bombay, Baroda and Central India Railway Company*, as to management, maintenance and working.

Contract, dated the 8th April 1907 (called the principal contract), *between the Secretary of State and the Bombay, Baroda and Central India Railway Company*, as to the maintenance, management and working, as from the 1st January 1906, of the Bombay, Baroda and Central India railway, the Rajputana-Malwa railway and other subsidiary lines.

Agreement, dated the 17th October 1908, *between the Cambay Durbar and the Bombay, Baroda and Central India Railway Company*, modifying the agreement of 17th May 1902.

Agreement, dated the 10th May 1910, *between the Cambay Durbar and the Bombay, Baroda and Central India Railway Company*, modifying further the agreement of 17th May 1902.

Main provisions of agreements and contract—

(i) *Land.*—Provided free of cost by the Cambay Durbar.

(ii) *Government aid.*—The line is the property of the Cambay Durbar (which provides all funds chargeable to the capital account), and is managed, maintained, stocked and worked by the Bombay, Baroda and Central India Railway Company as part of the Company's railway system.

(iii) *Terms of working.*—
(iv) *Distribution of profits.*—
(v) *Rates and fares.*—
(vi) *Special obligations as to the conveyance of.*—
(a) Mails, troops, high Government officials and Government stores.—
(b) Government bullion and coin, and the persons in charge thereof.—
(vii) *Power of the Durbar to determine agreement.*—
(viii) *Power of the Company to determine agreement.*—
(ix) *Term of agreement [if not determined under* (vii) *and* (viii)].—

} As noted under Petlad-Cambay railway (Anand-Tarapur section) (5′ 6″ gauge).

Statistics of working (Those for the periods prior to 1908 will be found in Appendix 38 to the Railway Administration Report for 1907).—

Year.	Mileage open at end of each year.	Total capital outlay, including suspense, to end of each year, *i.e.*, outlay on (*i*) lines open, and (*ii*) lines partly or wholly under construction.	Gross earnings.	Net earnings.	Percentage of net earnings on total capital outlay given in column (3).	Earnings per mile per week.	Proportion of expenses to earnings.
1	2	3	4	5	6	7	8
	Miles.	Rs.	Rs.	Rs.		Rs.	
1908	12·30	8,10,876	44,098	18,932	2·33	69	57·07
1909	12·30	8,50,220	43,431	20,982	2·47	68	51·69
1910	12·30	8,57,150	51,709	26,668	3·11	81	48·43
1911	12·30	8,65,463	57,830	28,728	3·33	90	50·23
1912	12·30	8,66,068	57,833	29,157	3·37	90	49·58
1st qr. of 1913	12·30	8,66,068	15,617	8,492	0·98	96	45·62
1913-14	12·30	8,66,999	53,711	27,045	3·12	84	49·65
1914-15	12·30	8,67,002	60,852	29,040	3·35	95	52·28
1915-16	12·30	8,74,561	68,054	35,624	4·07	106	47·65
1916-17	12·36	8,75,949	70,620	40,522	4·63	110	42·62
1917-18	12·36	8,80,659	64,122	35,795	4·06	100	44·18

BOMBAY, BARODA AND CENTRAL INDIA RAILWAY SYSTEM—*contd.*

Tapti Valley railway (5′ 6″ gauge)—

Date of registration of the Company.—17th June 1896.

Progress in opening—

Sections of railway.	Date of opening	Miles.	Total.
1	2	3	4
Kankra Khari to Vyára	1-12-98	35·59	
Vyára to Chinchpáda	5-6-99	36·55	
Chinchpáda to Nandurbár	20-7-99	25·20	
Nandurbár to Dondaiche	10-11-99	21·48	
Dondaiche to Nardána	25-11-99	19·98	
Nardána to Amalner	15-3-00	16·92	
TOTAL	...	...	155·72

Details of construction—

Permanent-way.—The permanent-way consists of 70-lb. with a small bit of 75-lb. flat-footed steel rails on wooden sleepers.

Ballast.—The line is ballasted throughout with stone.

Fencing.—Only station yards and important level crossings are fenced.

Curves.—The sharpest curve is of 1,910 feet radius.

Gradients.—The ruling gradient is 1 in 200.

Contracts—

Dated the 28th August 1896 (called the principal contract), *between the Secretary of State and the Tapti Valley Railway Company;*
Dated the 30th October 1896 (set forth in the schedule to the principal contract of 1896), *between the Secretary of State and the Bombay, Baroda and Central India Railway Company;*
} as to the construction, management, maintenance and working of the Tapti Valley railway.

Dated the 1st February 1901, *between the Secretary of State and the Bombay, Baroda and Central India Railway Company*, revising, and extending up to the 31st December 1905, the arrangements for the working of the Rajputana-Malwa and other lines.

Dated the 16th January 1902, *between the Secretary of State and the Tapti Valley Railway Company* modifying the terms on which the Company's line is worked by the Bombay, Baroda and Central India Railway Company.

Dated the 8th April 1907, *between the Secretary of State and the Bombay, Baroda and Central India Railway Company*, as to the maintenance, management and working, as from the 1st January 1906, of the Bombay, Baroda and Central India railway, the Rajputana-Malwa railway and other subsidiary lines.

Dated the 26th August 1907, *between the Secretary of State and the Tapti Valley Railway Company*, for the continuance of the working of the Tapti Valley railway on the terms in force on the 31st December 1905.

Dated the 10th July 1908, *between the Secretary of State and the Bombay, Baroda and Central India Railway Company;*
Dated the 12th November 1908, *between the Secretary of State and the Tapti Valley Railway Company;*
} giving effect, as from the 1st July 1908, to the arrangement agreed upon for the improvement of the rebate from interchanged traffic payable to the Tapti Valley Railway Company by the Bombay, Baroda and Central India Railway Company.

Dated the 30th June 1916, *between the Secretary of State, the Tapti Valley Railway Company and the Bombay, Baroda and Central India Railway Company* (supplemental to the contracts of 28th August and 30th October 1896, 16th January 1902, 26th August 1907 and 12th November 1908) as to the adoption of the Government financial year for the preparation of accounts from the 1st April 1913.

Main provisions of contracts—

(i) *Land.*—In British territory provided by the Government free of cost to the Company. The Secretary of State to use his influence to obtain the free grant of land in Native States.

(ii) *Government aid.*—
(iii) *Terms of working.*—
(iv) *Distribution of profits.*—
} The Government constructed the line (from funds supplied by the Company), and manage, work, stock and maintain it, through the agency of the Bombay, Baroda and Central India Railway Company. During the continuance of the contracts between the Secretary of State and the Bombay, Baroda and Central India Railway Company relating to the working of State branches, the charge to the Tapti Valley Railway Company in each half-year for the provision of rolling-stock and the working and maintenance of the line, is the share of the general working expenses of the whole of the 5′ 6″ and 3′ 3⅜″ gauge systems of railways worked by the Bombay, Baroda and Central India Railway Company which is attributable to the Tapti Valley railway in proportion to its gross earnings, less the rebate of 45 per cent of the combined shares attributable to the Bombay Baroda and Central India railway 5′ 6″ and 3′ 3⅜″ gauge systems of the gross earnings from traffic interchanged between those railways which the Government are entitled to retain, provided that the charge is not to exceed 44 per cent of the gross earnings in any year. In the event of the

BOMBAY, BARODA AND CENTRAL INDIA RAILWAY SYSTEM—*contd.*

Tapti Valley railway (5′ 6″ gauge)—*concld.*

Main provisions of contracts—*concld.*

termination of the contracts above referred to, the charge is to be a percentage of the gross earnings not exceeding in any half-year that obtaining on the Bombay, Baroda and Central India railway, nor in any year 50 per cent. The residue of the gross earnings, after deduction of the charge for working, etc., is payable to the Tapti Valley Railway Company.

By agreement with the Bombay, Baroda and Central India Railway Company, the Government allow to the Tapti Valley Railway Company in respect of each year, by way of rebate, a sum not exceeding 45 per cent of the combined shares attributable to the Bombay, Baroda and Central India railway 5′ 6″ and 3′ 3⅜″ gauge systems of the gross earnings from traffic interchanged between those railways, or either of them, and the Tapti Valley railway, as will, together with the net earnings of the Tapti Valley Railway Company, make up an amount equal to interest for the year at the rate of 4 per cent per annum on the actual capital expenditure. The Government also allow to the Company the sum of Rs. 6,000 per annum towards its office expenses and expenses of management.

(v) *Rates and fares.*—To be such as may from time to time be arranged between the Government and the working agency, but it is provided that they shall be within the maximum and minimum rates and fares for the time being in force on the Bombay, Baroda and Central India railway (5′ 6″ gauge). The classification of goods is to be in conformity with that in force on the Bombay, Baroda and Central India railway (5′ 6″ gauge).

(vi) *Special obligations as to the conveyance of.*—
(*a*) Mails, troops, high Government officials, and Government stores.—
(*b*) Government bullion and coin, and the persons in charge thereof.—
} As in the case of Bombay, Baroda and Central India railway (5′ 6″ gauge).

(vii) *Power of the Government to determine contract.*—The Government may, by giving 12 months' notice, determine the contract and acquire the railway—

(*a*) on the 31st December 1921, or at the end of any subsequent period of 10 years, in which case the Government undertake to pay to the Company in rupees a sum equal to 25 times the average yearly net earnings of the Company during the last preceding five years, provided that such sum shall not exceed by more than 20 per cent the total capital expenditure of the Company, nor be less than such capital expenditure; or

(*b*) on the 31st December 1950, in which case the Gove ament will pay to the Company in rupees an amount equal to the total capital expenditure.

(viii) *Power of the Company to surrender contract*—Nil.

(ix) *Term of contract* [*if not determined under* (vi) *or* (vii)].—Not specified.

Statistics of working—

Year.	Mileage open at end of each year.	Total capital outlay, including suspense, to end of each year, *i.e.*, outlay on (*i*) lines open and (*ii*) lines partly or wholly under construction.	Gross earnings.	Net earnings.	Percentage of net earnings on total capital outlay given in column (3).	Rebate from the Bombay, Baroda and Central India railway.	Total income.	Percentage of total income on total capital outlay given in column (3).	Earnings per mile per week.	Proportion of expenses to earnings.	Remarks.
1	2	3	4	5	6	7	8	9	10	11	12
	Miles.	Rs.	Rs.	Rs.		Rs.	Rs.		Rs.		
1898	35·91	82,70,413	2,836	...	...	...	...	...	18	48·70	The net earnings for 1898, 1899 and 1st-half of 1900 were credited to interest on capital, and those for 2nd-half of 1900 (including rebate) were treated as a set off against the charge to capital for interest in the accounts for 1st-half of 1901.
1899	138·88	1,21,09,133	2,42,593	...	...	...	...	...	73	47·40	
1900	155·45	1,28,31,291	6,68,475	...	...	...	...	...	85	47·68	
1901	155·48	1,29,18,730	6,00,553	3,42,243	2·65	33,226	3,75,469	2·90	74	43·01	
1902	155·48	1,29,70,581	8,26,485	4,63,242	3·57	45,196	5,08,438	3·92	102	42·95	
1903	155·48	1,30,02,400	8,62,753	4,83,142	3·72	40,258	5,23,400	4·03	107	44·00	
1904	155·48	1,30,77,018	6,58,740	3,68,894	2·82	28,441	3,97,335	3·04	81	44·00	
1905	155·48	1,30,83,629	10,11,222	5,86,921	4·49	2,928	5,89,849	4·51	125	41·96	
1906	155·48	1,30,82,853	11,34,712	6,35,460	4·86	...	6,35,460	4·86	140	44·00	
1907	155·48	1,30,97,237	10,34,612	5,79,383	4·42	...	5,79,383	4·42	128	44·00	
1908	155·48	1,30,90,929	9,98,927	5,59,399	4·27	...	5,59,399	4·27	124	44·00	
1909	155·48	1,31,10,300	11,06,564	6,19,676	4·73	...	6,19,676	4·73	137	44·00	
1910	155·48	1,31,20,549	11,85,910	6,64,110	5·06	...	6,64,110	5·06	147	44·00	
1911	155·48	1,31,37,174	12,91,825	7,23,422	5·51	...	7,23,422	5·51	160	44·00	
1912	155·48	1,31,41,972	14,36,446	8,04,410	6·12	...	8,04,410	6·12	178	44·00	
1st qr. of 1913.	155·48	1,31,43,606	4,01,816	2,25,017	1·71	...	2,25,017	1·71	199	44·00	
1913-14	155·48	1,31,47,512	15,92,836	8,91,988	6·78	...	8,91,988	6·78	197	44 00	
1914-15	155·48	1,31,78,535	13,20,802	7,39,649	5·61	...	7,39,649	5·61	163	44·00	
1915-16	155·48	1,32,03,810	17,22,141	9,64,399	7·30	...	9,64,399	7·30	213	44·00	
1916-17	155·72	1,32,10,781	15,55,554	8,91,238	6·75	...	8,91,238	6·75	192	43·63	
1917-18	155·72	1,32,37,221	15,74,902	8,81,945	6·66	...	8,81,945	6·66	194	44·00	

BOMBAY, BARODA AND CENTRAL INDIA RAILWAY SYSTEM—*contd.*

Bombay, Baroda and Central India railway (3′ 3⅜″ gauge)—

Progress in opening—

Sections of railway.	Date of opening.	Miles.	Total.	Grand total.	Remarks.
1	2	3	4	5	6
Rajputana section—					
Main line—					
Delhi to Rewári	14-2-73	51·21			
Rewári to Alwar	15-9-74	46·10			
Alwar to Bandikui	7-12-74	37·51			
Bandikui to Dausa	20-4-74	17·84			
Dausa to Jaipur	12-10-74	38·14			
Jaipur to Phulera	1-3-75	34·20			
Phulera to Ajmer	1-8-75	49·92			
Ajmer to Beáwar	15-5-78	32·41			
Beáwar to Haripúr	12-8-79	20·85			
Haripúr to Sojat Road	20-10-80	20·54			
Sojat Road to Pálanpur	1-1-81	148·44			
Pálanpur to Ahmedabad	15-11-79	82·36			
New zero of Ahmedabad-Dholka railway to facing point on main line of Sabarmati	12-2-08	0·66			
Branches and extensions—			580·18		
Viramgam-Wadhwan section—					
Viramgam to Wadhwan*	14-12-02	39·05			
			39·05		* This section was opened on the 5′ 6″ gauge from 25th May 1872 and converted to and opened on the 3′ 3⅜″ gauge, from 14th December 1902.
Farukhnagar Salt branch	14-2-73	7·64			
			7·64		
Agra branch—					
Bandikui to Bharatpur	20-4-74	60·28			
Bharatpur to Agra Fort	11-8-73	33·24			
Agra Fort to Jumna, East Bank (Agra)	1-1-76	1·50			
			95·02		
Sámbhar Lake Salt branch	1-3-75	4·50			
Japog extension	10-10-76	4·50			
Extension of Sámbhar branch to Jhowra	20-12-79	17·00			
Kankaroola Salt branch	15-2-81	1·25			
Additional salt lines in the Sámbhar lake	1-9-91	6·18			
Málwa section—			33·43		
Main line—					
Khandwa to Sanáwad	1-2-74	34·20			
Sanáwad to Mortakka	1-4-74	3·50			
Mortakka to Choral	20-1-75	20·50			
Choral to Mhow	1-1-78	15·69			
Mhow to Indore	3-8-76	13·00			
Indore to Fatehabad Junction.	3-8-76	25·23			
Fatehabad Junction to Ratlam	11-7-78	48·75			
Ratlam to Jaora	25-2-80	20·50			
Jaora to Mandsaur	8-4-80	31·75			
Mandsaur to Neemuch	2-7-80	30·25			
Neemuch to Nimbahera	10-3-81	16·40			
Nimbahera to Chitorgarh	19-3-81	17·65			
Chitorgarh to Nasirabad	1-12-81	100·65			
Nasirabad to Ajmer	14-2-76	14·15			
Ujjain branch—			392·22		
Fatehabad to Ujjain	3-8-76	12·00			
Ujjain branch extension across the Sipra river to Ujjain city.	1-3-84	†2·88			
			14·88		† Of this 2·10 miles, from Sipra Junction to Sipra station, opened in 1899 are on the 5′ 6″ gauge and is worked by B. B. and C. I. 5′ 6″ gauge railway.
Cawnpore-Achnera section—					
Main line—					
Cawnpore Mill line	26-4-09	2·34			
Cawnpore to Kanauj	15-12-80	49·20			
Kanauj to Farukhabad	1-2-81	36·71			
Farukhabad to Kásganj	14-4-84	66·78			
Kásganj to Háthras Road	1-7-84	34·04			
Háthras Road to Muttra Cantonment	19-10-75	29·11			
Jumna bridge	1-7-84	1·00			
Muttra Cantonment to old connection Muttra Junction.	11-11-07	2·32			
Old connection to Achnera	7-11-81	20·95			
			242·45		
Branches—					
Brahmavart branch	10-11-85	4·78			
Brindaban branch	26-8-89	7·25	12·03		
Rewári-Bhátinda-Fázilka section—					
Main line—					
Rewári to Hissar	20-3-83	88·20			
Hissar to Sirsa	1-1-84	50·75			
Sirsa to Kot Kapúra	1-10-84	73·24			
Kot Kapúra to Fázilka	1-1-85	50·26			
			262·45		
Rewári-Phulera Chord—					
Rewári to Narnaul	11-12-04	32·55			
Narnaul to Phulera	18-5-05	100·53			
			133·08		
Carried over	...	...	1,812·43		

BOMBAY, BARODA AND CENTRAL INDIA RAILWAY SYSTEM—*contd.*

Bombay, Baroda and Central India railway (3′ 3⅜″ gauge)—*contd.*

Progress in opening—*concld.*

Sections of railway.	Date of opening.	Miles.	Total.	Grand total.	Remarks.
1	2	3	4	5	6
Brought forward ...	...	...	...	1,812·43	
Broad (5′ 6″) gauge lines—					
Agra East Bank to Idgah Agra (worked by East Indian railway).	1-1-76	*3·07			* Of this the length over the Jumna bridge is of mixed (5′ 6″ and 3′ 3⅜″) gauge.
At Idgah Agra (worked by Bombay, Baroda and Central India 5′ 6″ gauge) railway.	...	0·29			† Opened for goods and troop traffic only.
At Delhi (worked by Great Indian Peninsula railway).	12-11-03	0·09			
Nangal-Raya Extension at Delhi (worked by North-Western railway).	22-6-15	†5·73	9·18		
				404·71	
Total ...	...	...	...	1,821·61	
Double line, Rajputana section—					
3′ 3⅜″ gauge—					
Agra Fort to Idgah Agra	11-8-73	1·14			
At Delhi	25-12-02	1·78	2·92		
5′ 6″ gauge—					
At Delhi	27-2-05	0·09	0·09		
Total double line . . .	...	...	...	3·01	

Details of construction—

Permanent-way.—The Rajputana section is laid with 50-lb. flat-footed steel rails on deodar sleepers excepting 20·08 miles north of Phulera station which have been relaid with 60-lb. rails on steel trough sleepers. The Malwa section has mixed 40-lb. iron, 41¼-lb. and 50-lb. steel flat-footed rails on deodar sleepers. The Cawnpore-Achnera section has 41¼-lb. and 50-lb. steel rails on deodar sleepers. The Rewári-Fázilka section has 41¼-lb. steel rails on deodar sleepers.

Ballast.—The line is ballasted throughout with stone, kunkur, sand and hard quartz.

Fencing.—The following lines are fenced: (1) Rajputana section, main line, Delhi to Ahmedabad *viâ* the Rewári-Phulera chord, 521·48 miles; Rewári-Bandikui-Phulera loop, 173·76 miles, and branches, 94·61 miles; (2) Malwa section, main line, Khandwa to Ajmer, 98·30 miles, and branch, 2·17 miles; (3) Cawnpore-Achnera section, main line, 148·23 miles and Brindaban branch, 2·69 miles; and (4) Rewári-Fázilka section, 114·62 miles, including stations.

Curves.—The sharpest curve is of 600 feet radius.

Gradients.—On the main line of the Rajputana section, Delhi to Ahmedabad, *viâ* Rewári-Phulera chord; on the Rewári-Bandikui-Phulera loop; and on the Brahmavart branch, the ruling gradient is 1 in 150. On the Agra branch it is 1 in 150, except for 1,058 feet where it is 1 in 142 and 841 feet where it is 1 in 145 at mile 1. On the Sambhar branch, it is 1 in 200, except for 3,810 feet where it is 1 in 150 at the beginning of the line. On the Farukhnagar branch it is 1 in 100. On the Malwa section it is 1 in 150, except between Khandwa and Kalakhund where it is 1 in 100 and between Kalakhund and Patal Pani (Mhow Ghat) where it is 1 in 40. On the Cawnpore-Achnera section, and on the Brindaban branch it is 1 in 200; and on the Rewári-Fázilka section, 1 in 169.

Contracts—
Main provisions of contracts— As noted under Bombay, Baroda and Central India railway (5′ 6″ gauge)

Statistics of working (Those for the periods prior to 1906 will be found in Appendix 38 to the Railway Administration Report for 1907.)—

Includes the Godhra-Rutlam-Nagda section *up to* 1911 and Viramgam-Wadhwan section *from* 1912.

Year.	Mileage open at end of each year.	Total capital outlay, including suspense, to end of each year, *i.e.*, outlay on (*i*) lines open and (*ii*) lines partly or wholly under construction.	Gross earnings.	Net earnings.	Percentage of net earnings on total capital outlay given in column (3).	Interest.	Company's share of surplus profits (based on terms of contract) *attributable to each year.*	Gain or loss to the State *pertaining to each year.*	Earnings per mile per week.	Proportion of expenses to earnings.
1	2	3	4	5	6	7	8	9	10	11
	Miles.	Rs.	Rs.	Rs.		Rs.		Rs.	Rs.	
1906 .	1,915·50	16,65,57,367	2,80,04,905	1,47,43,530	8·35	65,99,940		+ 81,43,590	281	47·35
1907 .	1,919·20	16,85,93,587	2,87,22,171	1,43,93,902	8·54	53,09,963	Included with Bombay, Baroda and Central India railway (5′ 6″ gauge).	+90,83,939	288	49·89
1908 .	1,918·54	17,64,83,727	2,47,43,850	94,10,603	5·33	60,67,222		+33,43,381	249	61·97
1909 .	1,919·72	18,04,84,544	2,51,98,999	1,08,98,636	6·04	61,19,498		+47,79,138	252	56·75
1910 .	1,919·64	18,18,63,774	2,85,10,644	1,44,84,804	7·96	61,72,944		+83,11,860	286	49·20
1911 .	1,917·73	18,23,81,723	3,08,25,507	1,50,83,603	8·27	63,40,819		+87,42,784	309	51·07
1912 .	1,815·64	16,55,41,245	3,15,97,819	1,61,10,247	9·73	59,67,519		+1,01,42,728	335	49·01
1st qr. of 1913	1,815·64	16,66,23,366	81,34,086	45,29,216	2·72	14,56,507		+30,72,709	345	44·32
1913-14	1,815·64	16,78,56,869	2,98,50,716	1 47,44,027	8·78	53,64,252		+93,79,775	316	50·61
1914-15	1,815·64	17,10,31,351	2,86,44,574	1,32,97,462	7·77	57,21,867		+75,75,595	303	53·58
1915-16	1,821·61	17,14,42,885	3,19,96,389	1,68,25,911	9·81	57,08,565	...	+1,11,17,346	338	47·41
1016-17	1,821·61	17,13,91,668	3,42,52,131	1,90,55,200	11·12	55,44,480		+1,35,10,720	362	44·37
1917-18	1,821·61	17,02,51,167	3,50,63,620	1,91,48,143	11·25	60,74,853		+1,30,73,290	370	45·39

BOMBAY, BARODA AND CENTRAL INDIA RAILWAY SYSTEM—*contd.*

Ahmedabad-Dholka railway (3′ 3⅜″ gauge)—

Date of registration of the Company.—22nd July 1901.

Progress in opening—

Sections of railway.	Date of opening.	Miles.	Total.
1	2	3	4
Sabarmati to Bavla	23-2-03	24·75	
Bavla to Dholka	1-4-03	8·79	
TOTAL ...	...	...	33·54

Details of construction—

Permanent-way.—The permanent-way consists of 41¼-lb. flat-footed steel rails on deodar sleepers.

Ballast.—The line is ballasted with stone.

Fencing.—Only station yards are fenced.

Curves.—The sharpest curve is of 1,146 feet radius.

Gradients.—The ruling gradient is 1 in 300, except for 400 feet near Sábarmáti, where it is 1 in 200 and for 4,000 feet between miles 1 and 2, where it is 1 in 286.

Contracts—

Dated the 1st February 1901, *between the Secretary of State and the Bombay, Baroda and Central India Railway Company,* revising, and extending up to the 31st December 1905, the arrangements for the working of the Rajputana-Malwa railway and other lines.

Dated the 25th March 1902, *between the Secretary of State and the Ahmedabad-Dholka Railway Company;*
Dated the 18th July 1902, *between the Secretary of State and the Bombay, Baroda and Central India Railway Company;* } as to the construction, management, maintenance and working of the Ahmedabad-Dholka railway.

Dated the 17th September 1902, *between the Secretary of State and the Ahmedabad-Dholka Railway Company,* modifying the contract of 1902, as to the issue and allotment to the Secretary of State of a certain number of fully paid up shares in the capital of the Company.

Dated the 8th April 1907, *between the Secretary of State and the Bombay, Baroda and Central India Railway Company,* as to the maintenance, management and working, as from the 1st January 1906, of the Bombay, Baroda and Central India railway, the Rajputana-Malwa railway and other subsidiary lines.

Dated the 10th July 1908, *between the Secretary of State and the Bombay, Baroda and Central India Railway Company;*
Dated the 12th November 1908, *between the Secretary of State and the Ahmedabad-Dholka Railway Company;* } giving effect, as from the 1st July 1908, to the arrangement agreed upon for the improvement of the rebate from interchanged traffic payable to the Ahmedabad-Dholka Railway Company by the Bombay, Baroda and Central India Railway Company.

Dated the 30th June 1916, *between the Secretary of State, the Ahmedabad Dholka Railway Company and the Bombay Baroda and Central India Railway Company,* (supplemental to the contracts of the 25th March and 18th July 1902 and 12th November 1908), as to the adoption of the Government financial year for the preparation of accounts from the 1st April 1913.

Main provisions of contracts—

(i) *Land.*—Provided by the Government free of cost to the Company.

(ii) *Government aid.—*
(iii) *Terms of working.—*
(iv) *Distribution of profits.—* } The Government constructed the line (from funds supplied by the Company), and manage, work, stock and maintain it, through the agency of the Bombay, Baroda and Central India Railway Company. During the continuance of the working agreement with the Bombay, Baroda and Central India Railway Company, the charge to the Ahmedabad-Dholka Railway Company for the provision of rolling-stock and the working and maintenance of the line, is the share of the general working expenses of the whole system of the 5′ 6″ and 3′ 3⅜″ gauge lines worked by the Bombay, Baroda and Central India Railway Company which is attributable to the Ahmedabad-Dholka railway in proportion to its gross earnings, less the amount of rebate of 45 per cent of the combined shares attributable to the Bombay, Baroda and Central India railway 5′ 6″ and 3′ 3⅜″ gauge systems of the gross earnings from traffic interchanged between those railways which the Government are entitled to retain, provided that the charge is not to exceed 44 per cent of the gross earnings in any year. In the event of the working agreement with the Bombay, Baroda and Central India Railway Company terminating before the contract with the Ahmedabad-Dholka Railway Company, the charge for working the latter Company's line is to be such percentage of the gross earnings as may be provided in any other working agreement that may be entered into, or, if the line be worked by State agency, such percentage as the Secretary of State may consider just or reasonable; but it is not in either case to exceed the percentage of working expenses on gross

BOMBAY, BARODA AND CENTRAL INDIA RAILWAY SYSTEM—*contd.*

Ahmedabad-Dholka railway (3′ 3⅜″ gauge)—*contd.*

Main provisions of contracts—*concld.*

earnings obtaining on the Bombay, Baroda and Central India railway, or 50 per cent in any year The residue of the gross earnings, after deduction of the charge for working, etc., is payable to the Ahmedabad-Dholka Railway Company. By agreement with the Bombay, Baroda and Central India Railway Company, the Government allow to the Ahmedabad-Dholka Railway Company in respect of each year, by way of rebate, a sum not exceeding 45 per cent of the combined shares attributable to the Bombay, Baroda and Central India railway 5′ 6″ and 3′ 3⅜″ gauge systems of the gross earnings from traffic interchanged between those railways, or either of them, and the Ahmedabad-Dholka railway, as will, together with the net earnings of the Ahmedabad-Dholka Railway Company, make up an amount equal to interest for the year at the rate of 4 per cent per annum on the actual capital expenditure. The Government also allow to the Company the sum of Rs. 5,000 per annum towards its office expenses and expenses of management; but when the Company's net earnings in any year exceed 4 per cent on the capital expenditure, the excess is to be applied towards the reduction of this allowance.

(v) *Rates and fares.*—To be such as may from time to time be arranged between the Government and the working agency, but it is provided that they shall be within the maximum and minimum for the time being in force on the Bombay, Baroda and Central India railway (3′ 3⅜″ gauge). The classification of goods is to be in conformity with that in force on the Bombay, Baroda and Central India railway (3′ 3⅜″ gauge).

(vi) *Special obligations as to the conveyance of.*—
(*a*) Mails, troops, high Government officials, and Government stores.—
(*b*) Government bullion and coin, and the persons in charge thereof.—
} As in the case of Bombay, Baroda and Central India railway (3′ 3⅜″ gauge).

(vii) *Power of the Government to determine contract.*—The Government may, by giving 12 months' notice, determine the contract and acquire the railway on the 30th June 1922, or at the end of any subsequent period of 10 years, in which case the Government undertake to pay to the Company in rupees a sum equal to 25 times the average yearly net earnings of the Company during the last preceding three years, provided that such sum shall not exceed by more than 20 per cent the total capital expenditure of the Company, nor be less than such capital expenditure.

(viii) *Power of the Company to surrender contract.*—Nil.

(ix) *Term of contract* [*if not determined under* (vi) *or* (vii)].—Not specified.

Statistics of working—

Year.	Mileage open at end of each year.	Total capital outlay, including suspense, to end of each year, *i.e.*, outlay on (*i*) lines open and (*ii*) lines partly or wholly under construction.	Gross earnings.	Net earnings.	Percentage of net earnings on total capital outlay given in column (3).	Rebate from the Bombay, Baroda and Central India railway.	Total income.	Percentage of total income on total capital outlay given in column(3).	Earnings per mile per week.	Proportion of expenses to earnings.
1	2	3	4	5	6	7	8	9	10	11
	Miles.	Rs.	Rs.	Rs.		Rs.	Rs.		Rs.	
1903 . .	33·50	10,02,172	64,261	35,986	3·59	...	35,986	3·59	45	44·00
1904 . .	33·50	10,17,308	99,044	55,465	5·45	...	55,465	5·45	57	44·00
1905 . .	33·50	10,44,995	98,214	57,203	5·47	...	57,203	5·47	56	41·76
1906 . .	33·50	10,83,722	1,00,743	56,418	5·21	...	56,418	5·21	58	44·00
1907 . .	33·50	11,11,330	1,15,159	64,489	5·80	...	64,489	5·80	66	44·00
1908 . .	33·50	10,91,212	1,28,206	71,795	6·58	...	71,795	6·58	74	44·00
1909 . .	33·54	11,05,286	1,20,149	67,283	6·09	...	67,283	6·09	69	44·00
1910 . .	33·54	11,10,937	1,29,669	72,615	6·54	...	72,615	6·54	74	44·00
1911 . .	33·54	11,17,717	1,32,107	73,980	6·62	...	73,980	6·62	76	44·00
1912 . .	33·54	11,17,717	1,33,740	74,895	6·70	...	74,895	6·70	77	44·00
1st qr. of 1913	33·54	11,17,717	28,368	15,886	1·42	...	15,886	1·42	65	44·00
1913-14 . .	33·54	11,17,443	1,24,609	69,781	6·24	...	69,781	6·24	71	44·00
1914-15 . .	33·54	11,17,443	1,24,409	69 669	6·23	...	69,669	6·23	71	44·00
1915-16 . .	33·54	11,17,443	1,23,728	69,288	6·20	...	69,288	6·20	71	41·00
1916-17 . .	33·54	11,17,751	1,17,369	67,217	6·01	...	67,217	6·01	67	42·63
1917-18 . .	33·54	11,18,320	1,48,186	82,984	7·42	...	82,984	7·42	85	44·00

Ahmedabad-Parantij railway (3′ 3⅜″ gauge)—

Date of registration of the Company.—6th January 1896.

Progress in opening—

Sections of railway.	Date of opening.	Miles.	Total.
1	2	3	4
Ahmedabad to Talod	1-5-97	33·82	
Talod to Parántij	2-7-97	7·83	
Parántij to Himmatnagar	23-10-97	14·05	
Himmatnagar to Khed Brahma	1-7-11	34·00	
TOTAL . .	...	...	88·70

BOMBAY, BARODA AND CENTRAL INDIA RAILWAY SYSTEM—*contd.*

Ahmedabad-Parantij railway (3′ 3⅜″ gauge)—*contd.*

Details of construction—

Permanent-way.—The permanent-way consists of 41¼-lb. flat-footed steel rails on creosoted pine and deodar sleepers.

Ballast.—The line is ballasted with kunkur, sand and stone.

Fencing.—Only station yards are fenced.

Curves.—The sharpest curve is of 1,146 feet radius.

Gradients.—The ruling gradient is 1 in 200.

Contracts—

Dated the 13th March 1896 (called the principal contract), *between the Secretary of State and the Ahmedabad-Parántij Railway Company*, as to the construction of the Ahmedabad-Paráńtij railway.

Dated the 4th June 1896, *between the Secretary of State and the Bombay, Baroda and Central India Railway Company*, as to the management, maintenance and working by the Company of the Ahmedabad-Parántij railway.

Dated the 1st February 1901, *between the Secretary of State and the Bombay, Baroda and Central India Railway Company*, revising, and extending up to the 31st December 1905, the arrangements for the working of the Rajputana-Malwa and other lines.

Dated the 29th January 1902, *between the Secretary of State and the Ahmedabad-Parántij Railway Company*, modifying the terms on which the Company's line is worked by the Bombay, Baroda andCentral India Railway Company.

Dated the 8th April 1907, *between the Secretary of State and the Bombay, Baroda and Central India Railway Company*, as to the management, maintenance and working, as from the 1st January 1906, of the Bombay, Baroda and Central India railway, the Rajputana-Malwa railway and other subsidiary lines.

Dated the 17th September 1907, *between the Secretary of State and the Ahmedabad-Parántij Railway Company*, for the continuance of the working of the Ahmedabad-Parántij railway on the terms in force on the 31st December 1905.

Dated the 2nd October 1908, *between the Secretary of State and the Bombay, Baroda and Central India Railway Company*;

Dated the 24th November 1910, *between the Secretary of State and the Ahmedabad-Parántij Railway Company*;

} As to the construction, management, maintenance and working of the Brahmakhed extension as part of the Ahmedabad-Parántij railway, subject to the modifications therein set forth of the terms applicable to the main line.

Dated the 30th June 1916, *between the Secretary of State, the Ahmedabad Parantij Railway Company and the Bombay Baroda and Central India Railway Company* (supplemental to the contracts of 13th March and 4th June 1896, 29th January 1902, 17th September 1907, 2nd October 1908 and 24th November 1910 as to the adoption of the Government financial year for the preparation of accounts from the 1st April 1912.

Main provisions of contracts—

(i) *Land.*—Provided by the Government free of cost to the Company. The Secretary of State to use his influence to obtain the free grant of land in Native States.

(ii) *Government aid.*—
(iii) *Terms of working.*—
(iv) *Distribution of profits.*—

The Government constructed the line (from funds supplied by the Company), and manage, work, stock and maintain it, through the agency of the Bombay, Baroda and Central India Railway Company. During the continuance of the contracts between the Secretary of State and the Bombay, Baroda and Central India Railway Company relating to the working of State branches, the charge to the Ahmedabad-Parántij Railway Company in each half-year for the provision of rolling-stock and the working and maintenance of the line is the share of the general working expenses of the whole of the 5′ 6″ and 3′ 3⅜″ gauge systems of railways worked by the Bombay, Baroda and Central India Railway Company which is attributable to the Ahmedabad-Parántij railway in proportion to its gross earnings, less the rebate of 10 per cent of the combined shares attributable to the Bombay, Baroda and Central India railway 5′ 6″ and 3′ 3⅜″ gauge systems of the gross earnings from traffic interchanged between those railways which the Government is entitled to retain, provided that the charge is not to exceed 44 per cent of the gross earnings in any year. In the event of the termination of the contracts above referred to, the charge is to be a percentage of the gross earnings not exceeding in any half-year that obtaining on the Bombay, Baroda and Central India railway, nor in any year 44 per cent. The residue of the gross earnings, after deduction of the charge for working, etc., is payable to the Ahmedabad-Parántij Railway Company.

By agreement with the Bombay, Baroda and Central India Railway Company, the Government allow to the Ahmedabad-Parántij Railway Company in respect of each year, by way of rebate, a sum not exceeding 10 per cent of the combined shares attributable to the Bombay, Baroda and Central India railway 5′ 6″ and 3′ 3⅜″ gauge systems of the gross earnings from traffic interchanged between those railways, or either of them, and the Ahmedabad-Parántij railway, as will, together with the net earnings of the Ahmedabad-Parántij Railway Company, make up an amount equal to interest for the year at the rate of 4 per cent per annum until the close of the half-year next after that in which the Brahmakhed extension is opened throughout for public traffic, and thereafter at 5 per cent per annum, on the actual capital expenditure. The Government also allow to the Company the sum of Rs. 5,000 per annum until the close of the half-year next after that in which the Brahmakhed extension is opened throughout for public traffic, and thereafter Rs. 6,000 per annum towards its office expenses and expenses of management.

BOMBAY, BARODA AND CENTRAL INDIA RAILWAY SYSTEM—*contd.*

Ahmedabad-Parantij railway (3′ 3⅜″ gauge)—*concld.*

Main provisions of contracts—*concld.*

(v) *Rates and fares.*—To be such as may from time to time be arranged between the Government and the working agency, but it is provided that they shall be within the maximum and minimum rates and fares for the time being in force on the Bombay, Baroda and Central India railway (3′ 3⅜″ gauge). The classification of goods is to be in conformity with that in force on the Bombay, Baroda and Central India railway (3′ 3⅜″ gauge).

(vi) *Special obligations as to the conveyance of.*—
(*a*) Mails, troops, high Government officials, and Government stores.—
(*b*) Government bullion and coin, and the persons in charge thereof.—
} As in the case of Bombay, Baroda and Central India railway.

(vii) *Power of the Government to determine contract.*—The Government may, by giving 12 months' notice, determine the contract and acquire the railway—
(*a*) on the 31st December 1930, or at the end of any subsequent period of 10 years, in which case the Government undertake to pay to the Company in rupees a sum equal to 25 times the average yearly net earnings of the Company during the last preceding five years, provided that such sum shall not exceed by more than 20 per cent the total capital expenditure of the Company, nor be less than such capital expenditure, or
(*b*) on the 31st December 1946, in which case the Government will pay to the Company in rupees an amount equal to the total capital expenditure.

(viii) *Power of the Company to surrender contract.*—Nil.

(ix) *Term of contract* [*if not determined under* (vi) *or* (vii)].—Not specified.

Statistics of working—

Year.	Mileage open at end of each year.	Total capital outlay, including suspense, to end of each year, *i.e.*, outlay on (*i*) lines open and (*ii*) lines partly or wholly under construction.	Gross earnings.	Net earnings.	Percentage of net earnings on total capital outlay given in column (3).	Rebate from the Bombay, Baroda and Central India railway.	Total income.	Percentage of total income on total capital outlay given in column (3).	Earnings per mile per week.	Proportion of expenses to earnings.
1	2	3	4	5	6	7	8	9	10	11
	Miles.	Rs.	Rs.	Rs.		Rs.	Rs.		Rs.	
1897	54·59	19,42,211	69,069	36,665	1·89	...	36,665	1·89	46	46·92
1898	54·59	19,42,971	1,49,790	85,836	4·42	...	85,836	4·42	53	42·70
1899	54·70	19,49,616	2,10,634	1,21,687	6·24	...	1,21,687	6·24	74	42·23
1900	54·70	19,55,305	2,65,105	1,55,952	7·98	...	1,55,952	7·98	93	41·17
1901	54·70	19,49,355	1,77,438	99,365	5·10	...	99,365	5·10	62	44·00
1902	54·70	19,70,012	1,79,794	1,00,685	5·11	...	1,00,685	5·11	63	44·00
1903	54·70	19,88,869	1,50,112	84,063	4·23	...	84,063	4·23	53	44·00
1904	54·70	19,89,045	1,86,227	1,04,287	5·24	...	1,04,287	5·24	65	44·00
1905	54·70	19,91,753	1,98,713	1,15,469	5·80	...	1,15,469	5·80	70	41·89
1906	54·70	19,98,023	2,20,934	1,23,727	6·19	...	1,23,727	6·19	78	44·00
1907	54·70	20,08,966	2,64,637	1,48,197	7·38	...	1,48,197	7·38	93	44·00
1908	54·70	20,26,012	2,95,664	1,65,572	8·17	...	1,65,572	8·17	104	44·00
1909	54·70	20,32,797	3,04,884	1,70,735	8·40	...	1,70,735	8·40	107	44·00
1910	54·70	28,71,739	3,21,710	1,80,158	6·27	...	1,80,158	6·27	113	44·00
1911	88·70	36,40,022	3,52,475	1,97,386	5·42	...	1,97,386	5·42	94	44·00
1912	88·70	36,64,696	3,47,122	1,94,388	5·30	...	1,94,388	5·30	75	44·00
1st qr. of 1913	88·70	36,83,679	1,03,425	57,918	1·57	...	57,918	1·57	90	44·00
1913-14	88·70	37,08,874	4,02,382	2,25,334	6·08	...	2,25,334	6·08	87	44·00
1914-15	88·70	37,18,368	4,25,995	2,38,557	6·42	...	2,38,557	6·42	92	44·00
1915-16	88·70	37,18,830	3,84,630	2,15,393	5·79	...	2,15,393	5·79	83	44·00
1916-17	88·70	37,23,823	3,37,371	1,93,542	5·20	...	1,93,542	5·20	73	42·63
1917-18	88·70	37,23,327	3,59,845	2,01,513	5·41	...	2,01,513	5·41	78	44·00

Gaekwar's Mehsana railway (3′ 3⅜″ gauge)—

Progress in opening—

Section of railway.	Date of opening.	Miles.	Total.	Grand total.
1	2	3	4	5
Viramgam-Mehsana-Taranga Hill section—				
Viramgam to Mehsana	1-2-91	40·21		
Mehsána to Vadnagar	21-3-87	20·73		
Vadnagar to Kheralu	12-12-88	7·00		
Kheralu to Taranga Hill	20-8-09	7·79		
			75·73	...
Kakosi extension—				
Mehsána to Pátan	20-7-91	24·69		
Pátan to Wagrod	15-1-15	14·72		
Wagrod to Kakosi	28-5-16	9·91		
			49·32	
Harij branch—				
Manund Road to Harij	23-10-08	20·95		
			20·95	
Bechraji extension—				
Chanasma to Bechraji	23-10-08	16·63	16·63	
TOTAL OPEN MILEAGE	...	...	...	162·63
UNDER CONSTRUCTION OR SANCTIONED FOR CONSTRUCTION—				
Khalipur to Khakhal (sanctioned on 15th March 1912)	...	17·22		
Wagrod to Khareda (sanctioned on 14th January 1913)	...	12·44	29·66	29·66
GRAND TOTAL	...	...	...	192.29

BOMBAY, BARODA AND CENTRAL INDIA RAILWAY SYSTEM—*contd.*

Gaekwar's Mehsana railway (3′ 3⅜″) gauge—*contd.*

Details of construction—

Permanent-way.—Except from mile 10 to mile 24·69 of the Mehsána-Pátan section, which is laid with 40-lb. iron rails on deodar sleepers, the line is laid with 41¼-lb. flat-footed steel rails on steel, deodar, half round jungle teak and Australian hard wood sleepers.

Ballast.—The line between Mehsána and Taranga Hill is ballasted with stone, between Manund Road and Harij and between Chanasma and Bechraji, with lime stone and the rest with kunkur.

Fencing.—Of the Manund Road-Harij and Chanasma-Bechraji sections only the station yards are fenced; and of the other three sections 41¼ miles are fenced by wire, and the rest with cactus, but this latter has in several places been entirely destroyed by floods and locusts and what remains is much broken up. On the Patan-Kakosi section only the station yards are fenced.

Curves.—The sharpest curve is of 1,910 feet radius.

Gradients.—On the Mehsána-Kherálu section the ruling gradient is 1 in 150, except for 5,100 feet, between Varetha and Taranga Hill, where it is 1 in 75. On the Mehsána-Viramgam section it is 1 in 400, except for 1,350 feet between miles 5 and 6 where it is 1 in 200 and 900 feet between miles 12 and 13 where it is 1 in 300. On the Mehsána-Pátan section it is 1 in 400, except for 850 feet between miles 6 and 7 where it is 1 in 200. On the Patan-Wagrod section it is 1 in 150, on the Manund Road-Harij section, 1 in 200 and on the Chanasma-Bechraji section, 1 in 366, all in banking section.

Agreements and contract—

Agreement, dated the 17th June 1893 (called "the Mehsána Working Agreement"), *between the Government of His Highness the Maharaja Gaekwar of Baroda and the Bombay, Baroda and Central India Railway Company*, as to the management, maintenance and working by the Company of the Gaekwar's Mehsána railway

Contract, dated the 8th April 1907 (called the principal contract), *between the Secretary of State and the Bombay, Baroda and Central India Railway Company*, as to the maintenance, management and working, as from the 1st January 1906, of the Bombay, Baroda and Central India railway, the Rajputana-Malwa railway and other subsidiary lines.

Agreement, dated the 20th July 1908, *between the Government of His Highness the Maharaja Gaekwar of Baroda and the Bombay, Baroda and Central India Railway Company*, as to the construction by the Company of the Gaekwar's Kherálu-Dabhora railway.

Agreement, dated the 20th July 1908, *between the Government of His Highness the Maharaja Gaekwar of Baroda and the Bombay, Baroda and Central India Railway Company*, as to the construction by the Company of the Gaekwar's Manund Road-Harij and Chanasma-Bechraji railways.

Agreement, dated the 16th February 1909, *between the Government of His Highness the Maharaja Gaekwar of Baroda and the Bombay, Baroda and Central India Railway Company*, modifying, as from the 27th March 1908 to the 26th March 1909, inclusive, the Mehsána Working Agreement of the 17th June 1893.

Agreement, dated the 15th December 1909, *between the Government of His Highness the Maharaja Gaekwar of Baroda and the Bombay, Baroda and Central India Railway Company*, as to the management, maintenance and working of the Manund Road-Harij and Chanasma-Bechraji lines from the date of opening to public traffic up to and including the 22nd October 1910.

Agreement, dated the 16th May 1910, *between the Government of His Highness the Maharaja Gaekwar of Baroda and the Bombay, Baroda and Central India Railway Company*, for the continuance of the management, maintenance and working, from the 27th March 1909, of the Mehsána-Kheralu, Mehsána-Viramgam and Mehsána-Pátan railways, subject to further modifications of the Mehsána Working Agreement of the 17th June 1893.

Agreement, dated the 17th May 1910, *between the Government of His Highness the Maharaja Gaekwar of Baroda and the Bombay, Baroda and Central India Railway Company*, as to the management, maintenance and working of the Kherálu-Varetha (Taranga Hill) extension, subject to further modifications of the Mehsána Working Agreement of the 17th June 1893.

Agreement, dated the 3rd December 1910, *between the Government of His Highness the Maharaja Gaekwar of Baroda and the Bombay, Baroda and Central India Railway Company*, as to the maintenance and working of the Manund Road-Harij and Chanasma-Bechraji lines as from the 23rd October 1910, subject to further modifications of the Mehsána Working Agreement of the 17th June 1893.

Agreement, dated the 30th October 1915, *between the Government of His Highness the Maharaja Gaekwar of Baroda and the Bombay, Baroda and Central India Railway Company*, as to the management, maintenance and working of the Patan-Wagrod and Wagrod-Kakosi extensions from the respective dates of their opening for public traffic, subject to further modifications of the "Mehsana Working Agreement" of the 17th June 1893 and the supplemental agreement of 16th May 1910.

Main provisions of agreements and contract—

(i) *Land.*—As under Petlad-Cambay railway (Anand-Tarapur section) (5′ 6″ gauge.)

(ii) *Government aid.*—The lines are the property of the Baroda Durbar (which provides all funds chargeable to the capital account), and are managed, maintained, stocked and worked by the Bombay Baroda and Central India Railway Company as part of the Company's railway system.

(iii) *Terms of working.*— } Excepting the cost of making good damages due to extraordinar

(iv) *Distribution of profits.*— } casualty which is borne by the Durbar and is chargeable against capital, and the charges for repairs or renewals of way, works and stations on the Patan-Wagro and Wagrod-Kakosi extensions, due to defective design or defective construction of the sai extensions or any portion of the same or to defective meterial used in the works constructed

BOMBAY, BARODA AND CENTRAL INDIA RAILWAY SYSTEM—*contd.*

Gaekwar's Mehsana railway (3′ 3⅜″ gauge)—*concld.*

Main provisions of agreements and contract—*concld.*

which are to be paid for by the Durbar, the Mehsána railway and the Manund Road-Harij and Chanasma-Bechraji railways and the Patan-Wagrod and Wagrod-Kakosi extensions are debited for maintenance and working expenses, including the cost of supervision and hire of rolling-stock, with the same percentage of gross earnings as may be incurred in the half-year on the 5′ 6″ and 3′ 3⅜″ gauge lines of the Bombay, Baroda and Central India railway system, and also with any single item of capital expenditure on "New minor works" costing Rs. 2,000 or less, subject to a maximum charge on such account of an amount bearing the same percentage of gross receipts as obtains for similar expenditure on the Bombay, Baroda and Central India railway. The balance in favour of or against the Baroda Durbar is paid over to, or by it, as the case may be.

(v) *Rates and fares.*—To be fixed from time to time by the Company with the approval of the Durbar; but in the absence of any special agreement between them, they are, as far as may be, to conform to those generally in force on the Bombay, Baroda and Central India railway (3′ 3⅜″ gauge).

(vi) *Special obligations as to the conveyance of*—

(*a*) Mails, troops, high Government officials and Government stores.—

(*b*) Government bullion and coin, and the persons in charge thereof.—

(vii) *Power of the Durbar to determine agreement.*—

(viii) *Power of the Company to determine agreement.*—

(ix) *Term of agreement* [*if not determined under* (vii) *and* (viii)].—

} As under Petlad Cambay railway (Anand-Tarapur section—5′ 6″ gauge).

Statistics of working (Those for the periods prior to 1908 will be found in Appendix 38 to the Railway Administration Report for 1907.)—

Year.	Mileage open at end of each year.	Total capital outlay, including suspense, to end of each year, *i.e.*, outlay on (*i*) lines open, and (*ii*) lines partly or wholly under construction.	Gross earnings.	Net earnings.	Percentage of net earnings on total capital outlay given in column (3).	Earnings per mile per week.	Proportion of expenses to earnings.
1	2	3	4	5	6	7	8
	Miles.	Rs.	Rs.	Rs.		Rs.	
1908 . . .	130·21	52,16,404	4,55,749	1,93,036	3·70	88	57·64
1909 . . .	138·01	53,43,871	5,57,732	2,56,206	4·79	78	54·06
1910 . . .	138·00	55,89,610	6,80,415	3,13,759	5·61	88	50·25
1911 . . .	138·00	57,02,244	6,46,429	3,20,799	5·63	90	50·37
1912 . . .	138·00	57,16,157	6,61,472	3,36,647	5·89	92	49·11
1st qr. of 1913 .	138·00	57,23,067	1,58,077	86,374	1·51	88	45·36
1913-14 . . .	138·00	57,80,979	6,58,961	3,30,495	5·72	92	49·85
1914-15 . . .	152·72	66,46,657	7,07,195	3,37,010	5·07	96	52·35
1915-16 . . .	152·72	64,67,495	7,14,241	3,72,108	5·75	90	47·90
1916-17 . . .	162·63	68,97,803	7,35,224	4,21,341	6·11	88	42·69
1917-18 . . .	162·63	69,03,986	8,30,887	4,64,141	6·72	98	44·14

Jaipur State railway (3′ 3⅜″ gauge)—

Progress in opening—

Sections of railway.	Date of opening.	Miles.	Total	Grand total.
1	2	3	4	5
Main line—				
Sánganer to Nawai	10-11-05	32·18		
Nawai to Siwai-Mádhopur	17-10-07	40·66		
Reengus extension—			72·84	
Jaipur to Reengus	19-12-16	35·20		
			35·20	
TOTAL OPEN MILEAGE . .	...	...		
UNDER CONSTRUCTION OR SANCTIONED FOR CONSTRUCTION—			108·04	
Reengus to Sikar (sanctioned on 5th October 1914) . . .	...	30·97		
Sikar to Jhunjhnu (sanctioned on 15th June 1916) . . .	...	39·85	70·82	
GRAND TOTAL . .	...	...	...	178·86

Details of construction—

Permanent-way.—The permanent-way consists of 41½-lb. flat-footed steel rails laid on deodar sleepers on the main line and of 41½-lb. British section rails on deodar and sal sleepers on the Reengus extension.

Ballast.—The line is ballasted with stone.

Fencing.—The line is unfenced except at stations and at points where the line crosses the main road.

Curves.—The sharpest curve is of 1,910 feet radius.

Gradients.—The ruling gradient is 1 in 250, except for 4 miles and 1,080 feet at the beginning of the line and on the Reengus extension, where it is 1 in 200.

BOMBAY, BARODA AND CENTRAL INDIA RAILWAY SYSTEM—*contd.*

Jaipur State railway (3′ 3⅜″ gauge)—*contd.*

Agreement—

Agreement, dated the 11th September 1906, *between the Jaipur Durbar and the Bombay, Baroda and Central India Railway Company*, as to the management, maintenance and working by the Company of the Jaipur State railway.

Railway Board's letter No. 1310 R.T., dated the 30th October 1907, as to the payment of rebate to the Jaipur Durbar.

Main provisions of agreement—

(i) *Land.*—Provided by the Jaipur Durbar at the cost of capital.

(ii) *Government aid.*—The line is the property of the Jaipur Durbar (which provides all funds chargeable to the capital account), and is managed, maintained, stocked and worked by the Company as part of its railway system. By way of rebate the Government allow out of their share of the net earnings of the Bombay, Baroda and Central India railway (3′ 3⅜″ gauge) (outside the contract between the Secretary of State and the Bombay, Baroda and Central India Railway Company), a sum up to 10 per cent of the net earnings of the main line from traffic interchanged with the Jaipur State railway to such extent as is necessary to make up, together with the net earnings of the Jaipur railway, an amount sufficient to give a return of 3½ per cent per annum on the capital expenditure incurred.

(iii) *Terms of working.*—
(iv) *Distribution of profits.*—
} Excluding the cost of making good damages due to extraordinary casualty which is borne by the Durbar and is chargeable against capital, the Jaipur State railway is debited for maintenance and working expenses, including the cost of supervision and use of rolling-stock, with the same percentage of the gross earnings of the Jaipur State railway as the total expenditure incurred on the entire Bombay, Baroda and Central India railway system bears to the earnings of that system, and also with any single item of capital expenditure not exceeding Rs. 2,000, subject to a maximum charge on such account of an amount bearing the same percentage of gross receipts as obtains for similar expenditure on that system. The balance in favour of or against the Jaipur Durbar is paid over to, or by it, as the case may be.

(v) *Rates and fares.*—To be fixed from time to time by the Company with the approval of the Jaipur Durbar and, in the absence of any special agreement between them, to conform, as far as may be, to those generally in force on the Bombay, Baroda and Central India railway (3′ 3⅜″ gauge).

(vi) *Special obligations as to the conveyance of—*

(*a*) Mails, troops, high Government officials and Government stores.—Mails and postal officers on duty to be carried at the rates and on the conditions in force from time to time on State railways in British India. (There is no provision for the carriage at special rates of troops, high Government officials and Government stores.)

(*b*) Government bullion and coin, and the persons in charge thereof.—Not specified.

(vii) *Power of the Durbar to determine agreement.*—
(viii) *Power of the Company to determine agreement.*—
} After 2 years from the date of opening (*viz.*, the 17th October 1907) of the Jaipur State railway the agreement may be determined by either party giving to the other 12 calendar months' notice expiring on the 30th September or 31st March of any year.

(ix) *Term of agreement* [*if not determined under* (vii) *and* (viii)].—None specified.

Statistics of working (Those for the periods prior to 1908 will be found in Appendix 38 to the Railway Administration Report for 1907.)—

Year.	Mileage open at end of each year.	Total capital outlay, including suspense, to end of each year, *i.e.*, outlay on (*i*) lines open, and (*ii*) lines partly or wholly under construction.	Gross earnings.	Net earnings.	Percentage of net earnings on total capital outlay given in column (3).	Earnings per mile per week.	Proportion of expenses to earnings.
1	2	3	4	5	6	7	8
	Miles.	Rs.	Rs.	Rs.			
1908	72·84	24,01,041	1,16,415	49,648	2·07	31	57·35
1909	72 84	24,02,410	1,44,902	68,820	2·86	38	52·51
1910	72·84	24,03,971	2,14,761	1 10,290	4·59	57	48·65
1911	72·84	24,09,763	2,70,684	1,33,743	5·55	71	50·48
1912	72·84	24,09,763	3,18,550	1,58,641	6·58	83	49·40
1st qr. of 1913	72·84	24,12,332	96,233	52,137	2·16	102	45·82
1913-14	72·84	24,74,723	3,12,429	1,57,262	6 35	82	49·66
1914-15	72·84	36,40,371	2,94,080	1,40,235	3·85	78	52 31
1915-16	72·84	45,76,524	3,94,842	2,69,788	4·58	104	46·87
1916-17	107·22	51,70,743	4,46,928	2,54,947	4·93	104	42·96
1917-18	108·04	54,07,542	3,82,033	2,13,839	3·95	68	44·03

BOMBAY, BARODA AND CENTRAL INDIA RAILWAY SYSTEM—*contd.*

Pálanpur-Deesa railway (3′ 3⅜″ gauge)—

Progress in opening—

Section of railway.	Date of opening.	Miles.	Total.
1	2	3	4
Pálanpur to Deesa	8-11-93	17·28	17·28

Details of construction—

Permanent-way.—The permanent-way consists of 41¼-lb. flat-footed steel rails, 2·75 miles of which are laid on cast iron plate sleepers and the rest on wooden sleepers of various kinds.

Ballast.—The line is ballasted with stone and sand.

Fencing.—The line is fenced throughout.

Curves.—The sharpest curve is of 1,910 feet radius.

Gradients.—The ruling gradient is 1 in 150.

Contracts—

Letter from the Government of India, Public Works Department, No. 352 R.C., dated the 25th March 1892, to the Government of Bombay;
Letter from the Under Secretary of State for India, No. 682, dated the 18th May 1892, to the Board of Directors, Bombay, Baroda and Central India Railway Company;
Letter from the Board of Directors, Bombay, Baroda and Central India Railway Company, No. 611, dated the 20th May 1892, to the Under Secretary of State for India;
Letter from the Under Secretary of State for India, No. 920, dated the 22nd June 1892, to the Board of Directors, Bombay, Baroda and Central India Railway Company;
Letter from the Government of Bombay, No. 1643, dated the 19th August 1892, to the Government of India, Public Works Department

} As to the construction, management, maintenance and working, by the Bombay, Baroda and Central India Railway Company, of the Pálanpur-Deesa railway as a part of the Rajputana-Malwa railway.

Contract, dated the 1st February 1901, *between the Secretary of State and the Bombay, Baroda and Central India Railway Company*, revising, and extending up to the 31st December 1905, the arrangements for the working of the Rajputana-Malwa and other lines.

Contract, dated the 8th April 1907, *between the Secretary of State and the Bombay, Baroda and Central India Railway Company*, as to the management, maintenance and working, as from the 1st January 1906, of the Bombay, Baroda and Central India railway, the Rajputana-Malwa railway and other subsidiary lines.

Main provisions of contracts—

(i) *Land.*—Provided free of cost by the Pálanpur Durbar.

(ii) *Government aid.*—The railway is owned jointly by the Government and the Pálanpur Durbar, and the former provide any further open line capital funds. It was constructed and is managed, maintained, stocked and worked by the Bombay, Baroda and Central India Railway Company as part of the Bombay, Baroda and Central India railway (3′ 3⅜″ gauge).

(iii) *Terms of working.*—The railway is debited with a share of the general working expenses of the Bombay, Baroda and Central India Railway Company's system in proportion to the gross earnings of the Pálanpur-Deesa railway.

(iv) *Distribution of profits.*—The net earnings, after deducting the working expenses as in (iii) above, in any half-year, are to be divided between the Government and the Pálanpur Durbar in proportion to the capital provided by each, after excluding (so long as the line remains a 3′ 3⅜″ gauge one) from the Government capital the sum of Rs. 25,117 the extra expenditure incurred in providing a 5′ 6″ gauge sub-structure.

(v) *Rates and fares.*—
(vi) *Special obligations as to the conveyance of.*—
(*a*) Mails, troops, high Government officials and Government stores.—
(*b*) Government bullion and coin, and the persons in charge thereof.—

} As under Bombay, Baroda and Central India railway (3′ 3⅜″ gauge).

(vii) *Power of the Government to determine contract.*—
(viii) *Power of the Company to determine contract.*—
(ix) *Term of contract.*—

} The agreement is co-terminous with the Company's contract with the Secretary of State for working the Bombay, Baroda and Central India railway (3′ 3⅜″ gauge), unless it be decided to extend the railway in which case it will be open to the Government to terminate the working arrangement on giving the Company 6 months' notice.

BOMBAY, BARODA AND CENTRAL INDIA RAILWAY SYSTEM—*contd.*

Pálanpur-Deesa railway (3′ 5⅜″ gauge)—*concld.*

Statistics of working—

Year.	Mileage open at end of each year.	Total capital outlay, including suspense, to end of each year, *i.e.*, outlay on (*i*) lines open, and (*ii*) lines partly or wholly under construction.		Gross earnings.	Net earnings.		Percentage of net earnings on total capital outlay given in columns (3) and (4).		Interest on Government capital.	Gain or loss to Government *pertaining to each year.*	Earnings per mile per week.	Proportion of expenses to earnings.
		Contributed by the Pálanpur Durbar.	Contributed by Government.		Attributable to the Durbar.	Attributable to Government.	On capital contributed by the Durbar.	On capital contributed by Government.				
1	2	3	4	5	6	7	8	9	10	11	12	13
	Miles.	Rs.	Rs.	Rs.	Rs.	Rs.			Rs.	Rs.	Rs.	
1893	17·28	1,85,000	1,78,953	4,436	1,335	1,110	0·72	0·62	5,371	—4,261	33	44·88
1894	17·28	1,85,000	2,14,601	37,544	11,365	11,781	6·14	5·49	8,783	+2,998	42	38·35
1895	17·28	1,85,000	2,15,374	38,182	11,383	11,512	6·13	5·35	8,378	+3,134	42	40·17
1896	17·28	1,85,000	2,32,746	51,629	14,101	15,072	7·62	6·48	9,149	+5,923	57	43·49
1897	17·28	1,85,000	2,33,264	43,264	10,883	12,243	5·88	5·25	9,305	+2,938	48	46·55
1898	17·28	1,85,000	2,33,264	38,199	10,334	11,628	5·59	4·99	9,331	+2,297	43	42·51
1899	17·28	1,85,000	2,33,264	44,628	12,102	13,618	6·54	5·84	9,330	+4,288	50	42·37
1900	17·28	1,85,000	2,33,264	47,669	12,636	14,218	6·83	6·10	9,330	+4,888	53	43·67
1901	17·28	1,85,000	2,33,264	36,805	9,375	10,548	5·07	4·52	9,330	+1,218	41	45·67
1902	17·28	1,85,000	2,36,786	33,690	8,329	9,521	4·50	4·02	9,408	+113	37	47·01
1903	17·28	1,85,000	2,37,069	29,734	7,141	8,181	3·86	3·45	9,432	—1,251	33	48·47
1904	17·28	1,85,000	2,37,069	29,185	7,280	8,340	3·94	3·52	9,474	—1,134	32	46·48
1905	17·28	1,85,000	2,37,069	35,178	9,469	10,848	5·12	4·58	9,472	+1,376	39	42·25
1906	17·28	1,85,000	2,39,155	40,154	9,862	11,376	5·33	4·76	9,531	+1,845	45	47·11
1907	17·28	1,85,000	2,39,155	42,061	10,266	11,878	5·55	4·97	7,223	+4,655	47	47·35
1908	17·28	1,85,000	2,47,156	45,680	9,097	10,728	4·92	4·34	8,213	+2,515	51	56·60
1909	17·28	1,85,000	2,45,700	53,323	11,757	14,034	6·36	5·71	8,259	+5,775	59	51·63
1910	17·28	1,85,000	2,45,700	58,152	13,663	6,291	7·39	6·63	8,216	+8,075	65	48·49
1911	17·28	1,85,000	2,45,700	52,775	11,949	14,248	6·46	5·80	8,332	+5,916	59	50·36
1912	17·28	1,85,000	2,45,700	51,837	11,891	14,177	6·43	5·77	8,400	+5,777	58	49·71
1st qr. of 1913	17·28	1,85,000	2,45,700	14,813	3,677	4,384	1·99	1·78	2,089	+2,295	66	45·58
1913-14	17·28	1,85,000	2,45,700	57,919	13,258	15,808	7·17	6·43	8,324	+7,484	64	49·84
1914-15	17·28	1,85,000	2,45,700	61,408	13,328	15,892	7·20	6·47	8,598	+7,294	68	52·42
1915-16	17·28	1,85,000	2,45,700	66,539	15,897	18,955	8·59	7·71	8,532	+10,423	74	47·62
1916-17	17·28	1,85,000	2,45,700	56.069	14,632	17,445	7·91	7·10	8,099	+9,346	62	42·79
1917-18	17·28	1,85,000	2,45,700	58,820	15,009	17,896	8·11	7 28	8,533	+9,363	65	44·06

Vijapur-Kálol-Kadi railway (3′ 3¾″ gauge)—

Progress in opening—

Sections of railway.	Date of opening.	Miles.	Total.	Grand Total.
1	2	3	4	5
Vijapur to Kálol	10-6-02	29·44		
Kálol to Kadi	13-7-03	11·93		
Kadi to Bhoyani Road	1-4-12	4·74		
TOTAL OPEN MILEAGE	...	...	46·11	
UNDER CONSTRUCTION OR SANCTIONED FOR CONSTRUCTION— Bhoyani Road to Bechraji (sanctioned on 5th August 1916)	...	21·30	21·30	67·41

Details of construction—

Permanent-way.—21 miles are laid with 41¼-lb. flat-footed steel rails and 25 miles with 40-lb. flat-footed iron rails on deodar sleepers.

Ballast.—The line is ballasted with stone and kunker.

Fencing.—Only station yards and 11·07 miles of the Vijapur-Kálol section are fenced.

Curves.—The radius of the sharpest curve is 3,820 feet on the Vijapur-Kadi section and 1,910 feet on the Kadi-Bhoyani Road section.

Gradients.—The ruling gradient is 1 in 150 between Vijapur and Kadi and 1 in 200 between Kadi and Bhoyani Road.

BOMBAY, BARODA AND CENTRAL INDIA RAILWAY SYSTEM—*contd.*

Vijapur-Kalol-Kadi railway (3′ 3⅜″ gauge)—*concld.*

Agreements and contract—

Agreement, dated the 23rd November 1903, *between the Government of His Highness the Maharaja Gaekwar of Baroda and the Bombay, Baroda and Central India Railway Company*, as to the management, maintenance and working, by the Bombay, Baroda and Central India Railway Company, of the Vijapur-Kálol-Kadi railway.

Contract, dated the 8th April 1907 (called the principal contract), *between the Secretary of State and the Bombay, Baroda and Central India Railway Company*, as to the management, maintenance and working, as from the 1st January 1906, of the Bombay, Baroda and Central India railway, the Rajputana-Malwa railway and other subsidiary lines.

Agreement, dated the 3rd March 1909, *between the Government of His Highness the Maharaja Gaekwar of Baroda and the Bombay, Baroda and Central India Railway Company*, modifying as from the 1st July 1908 to the 30th June 1909, inclusive, the agreement of the 23rd November 1903.

Agreement, dated the 16th May 1910, *between the Government of His Highness the Maharaja Gaekwar of Baroda and the Bombay, Baroda and Central India Railway Company*, for the continuance of the management, maintenance and working, from the 1st July 1909, of the Vijapur-Kálol-Kadi railway, subject to further modifications of the agreement of the 23rd November 1903.

Agreement, dated the 17th June 1913, *between the Government of His Highness the Maharaja Gaekwar of Baroda and the Bombay, Baroda and Central India Railway Company*, as to the management, maintenance and working of the Kadi-Bhoyani extension, subject to further modifications of the agreement of the 23rd November 1903.

Main provisions of agreements and contract—

As noted under Gaekwar's Mehsana railway (3′ 3⅜″ gauge), with the exception that charges for repairs or renewals of way, works and stations on the Kadi-Bhoyani extension, due to defective design or construction of the extension or to defective materials used in the works constructed, are to be paid for by the Durbar.

Statistics of working (Those for the periods prior to 1908 will be found in Appendix 38 to the Railway Administration Report for 1907.)—

Year.	Mileage open at end of each year.	Total capital outlay, including suspense, to end of each year, *i.e.*, outlay on (*i*) lines open and (*ii*) lines partly or wholly under construction.	Gross earnings.	Net earnings.	Percentage of net earnings on total capital outlay given in column (3).	Earnings per mile per week.	Proportion of expenses to earnings.
1	2	3	4	5	6	7	8
	Miles.	Rs.	Rs.	Rs.		Rs.	
1908 . . .	41·37	13,12,860	1,20,643	51,999	3·96	56	56·90
1909 . . .	41·37	13,08,388	1,17,211	56,498	4·32	54	51·80
1910 . . .	41·37	13,29,176	1,32,202	68,019	5·12	61	48·55
1911 . . .	41·37	15,14,964	1,35,891	67,582	4·46	63	50·27
1912 . . .	46·11	15,63,509	1,34,917	68,346	4·37	58	49·35
1st qr. of 1913 .	46·11	15,61,365	34,840	18,981	1·22	58	45·52
1913-14 . .	46·11	15,71,787	1,45,014	72,768	4·63	60	49·82
1914-15 . . .	46·11	16,02,858	1,63,126	77,712	4·85	66	52·36
1915 16 . . .	46·11	16,31,527	1,63,238	85,045	5·21	68	47·90
1916-17 . . .	46·11	18,92,634	1,56,316	89,339	4·72	65	42·85
1917-18 . . .	46·11	21,06,018	1,51,600	84,762	4·02	63	44·09

Bilimora-Kalamba railway (2′ 6″ gauge)—

Progress in opening—

Sections of railway.	Date of opening.	Miles.	Total.	Grand total.
1	2	3	4	5
Bilimora to Rankuwa	23-7-14	13·42		
Rankuwa to Unai	22-1-15	12·82		
Unai to Kalamba	1-5-17	8·69		
TOTAL OPEN MILEAGE ...	...	...	34·93	
UNDER CONSTRUCTION OR SANCTIONED FOR CONSTRUCTION—				
Mahuva to Anaval (sanctioned on 11th May 1914)	...	17·91	17·91	
GRAND TOTAL ...	...	...	...	52·84

BOMBAY, BARODA AND CENTRAL INDIA RAILWAY SYSTEM—*contd.*

Bilimora-Kalamba railway (2″ 6′ gauge)—*concld.*

Details of construction—

Permanent-way.—The permanent way consists of 30-lb. flat-footed steel rails on sâl sleepers.
Ballast.—The line is ballasted with sand and moorum.
Fencing.—The line is unfenced.
Curves.—The sharpest curve is of 1,442 feet radius.
Gradients.—The ruling gradient is 1 in 150, and 1 in 700 between Unai and Kalamba.

Agreement—

Dated the 23rd October 1914, *between the Government of His Highness the Maharaja Gaekwar of Baroda and the Bombay, Baroda and Central India Railway Company*, as to the management, maintenance and working of the Bilimora-Kalamba railway.

Main provisions of agreement—

(i) *Land.*—
(ii) *Government aid.*— } As noted under Petlad-Cambay railway (Anand-Tarapur section) (5′ 6″ gauge).
(iii) *Terms of working.*—
(iv) *Distribution of profits.*— } The Company works the Bilimora-Kalamba railway at actual cost, *plus* a sum equal to 10 per cent of the total working expenses, but not less than Rs. 300 per mensem in the half-year for superintendence. The railway is also debited with a contribution from its net earnings to the Company's Provident Fund calculated on the same basis as obtains on the Bombay, Baroda and Central India railway. The balance in favour of or against the Baroda Durbar is paid over to or by it, as the case may be.
(v) *Rates and fares.*—
(vi) *Special obligations as to the conveyance of.*—
(*a*) Mails, troops, high Government officials and Government stores.—
(*b*) Government bullion and coin and the persons in charge thereof.— } As noted under Petlad Cambay railway (Anand-Tarapur section) (5′ 6″ gauge).
(vii) *Power of the Durbar to determine agreement.*—
(viii) *Power of the Company to determine agreement.*— } The agreement may be terminated at any time on one year's notice from either side, to expire on the 30th September or 31st March in any year.
(ix) *Term of agreement* [*if not determined under* (vii) *and* (viii)].—Not specified.

Statistics of working—

Year.	Mileage open at end of each year.	Total capital outlay, including suspense, to end of each year, *i.e.* outlay on (*i*) lines open, and (*ii*) lines partly or wholly under construction.	Gross earnings.	Net earnings.	Percentage of net earnings on total capital outlay given in column (3).	Earnings per mile per week.	Proportion of expenses to earnings.
1	2	3	4	5	6	7	8
	Miles.	Rs.	Rs.	Rs.		Rs.	
1914-15	26·32	13,43,373	12,648	5,974	0·44	32	69·59
1915-16	26·32	14,15,786	45,840	3,164	0·22	33	93·10
1916-17	26·24	14,96,964	57,805	15,913	1·06	42	72·47
1917-18	34·93	15,53,071	61,489	6,277	0·40	34	89·79

Bodeli-Chhota Udaipur railway (2′ 6″ gauge)—

Sanction to the construction of this line by the agency of the Bombay, Baroda and Central India Railway Company, on behalf of the Baroda and Chhota Udaipur Durbars, was conveyed in Railway Department (Railway Board) Notification No. 25, dated the 2nd February 1915.

Progress in opening—

Section of railway.	Date of opening.	Miles.	Total.
1	2	3	4
Bodeli to Chhota Udaipur	1-12-17	22·56	22·56

BOMBAY, BARODA AND CENTRAL INDIA RAILWAY SYSTEM—*concld.*

Bodeli-Chhota Udaipur railway (2' 6' gauge)—*concld.*

Details of construction—

Permanent-way.—The permanent-way consists of 41¼ lb. flat-footed rails laid on wooden sleepers.
Ballast.—The line is ballasted with sand.
Fencing.—The line is fenced at important level crossings only.
Curves.—The sharpest curve is of 819 feet radius.
Gradients.—The ruling gradient is flatter than 1 in 1,000 including level.

Agreement—

The line has been constructed by the Bombay, Baroda and Central India Railway Company on behalf of the Baroda and Chhota Udaipur Durbars. It is being maintained and worked as an extension of the Gaekwar's Dabhoi railway under the terms and conditions which apply to that railway, subject to certain modifications which are under consideration.

Statistics of working—

Year.	Mileage open at end of the year.	Total capital outlay including suspense, to end of the year, i.e., outlay on (i) lines open and (ii) lines partly or wholly under construction.		Gross earnings.	Net earnings.		Percentage of net earnings on total capital outlay given in column (3).		Earnings per mile per week.	Proportion of expenses to earnings.
		Contributed by the Baroda Durbar.	Contributed by the Chhota Udaipur Durbar.		Attributable to the Baroda Durbar.	Attributable to the Chhota Udaipur Durbar.	On capital contributed by the Baroda Durbar.	On capital contributed by the Chhota Udaipur Durbar.		
1	2	3	4	5	6	7	8	9	10	11
	Miles.	Rs.	Rs.	Rs.	Rs.	Rs.			Rs.	
1917-18.	22·56	5,05,630	5,05,630	18,856	6,576	1,832	1·30	0·36	48	55·41

Broach-Jambusar railway (2' 6" gauge)—

Progress in opening—

Section of railway.	Date of opening.	Miles.	Total.
1	2	3	4
Broach to Jambusar	23-11-14	29·69	29·69

Details of construction—

Permanent way—The line is laid with second-hand 41½-lbs. flat-footed steel rails, partly on sâl and partly on half-round jungle wood sleepers.
Ballast.—The line is being ballasted with sand.
Fencing.—The line is unfenced.
Curves.—The sharpest curve is of 603·8 feet radius.
Gradients.—The ruling gradient is 1 in 200.

Contracts—
Main provisions of contracts— This line is a branch of the Bombay, Baroda and Central India railway and is worked under the contracts noted under Bombay, Baroda and Central India railway (5' 6" gauge).

Statistics of working.—

Year.	Mileage open at end of each year.	Total capital outlay including suspense, to end of each year, i.e., outlay on (i) lines open, and (ii) lines partly or wholly under construction.	Gross earnings.	Net earnings.	Percentage of net earnings on total capital outlay given in column (3).	Interest.	Gain or loss to the State pertaining to each year.	Earnings per mile per week.	Proportion of expenses to earnings.
1	2	3	4	5	6	7	8	9	10
	Miles.	Rs.	Rs.	Rs.				Rs.	
1914-15	29 78	13,28,661	21,756	11,069	0·83	41,525	−80,456	40	49·12
1915-16	29·78	13,95,233	83,433	43,282	3·10	47,294	−4,012	54	48·12
1916-17	29·69	14,10,287	89,083	41,632	2·95	46,241	−4,609	58	53·27
1917-18	29·69	14,17,183	1,40,739	78,180	5·52	49,099	+29,081	91	44·45

BOMBAY BARODA AND CENTRAL INDIA RAILWAY SYSTEM—*contd.*

Gaekwar's Dabhoi railway (2′ 6″ gauge) —

Progress in opening—

Sections of railway.	Date of opening.	Miles.	Total.	Grand total.
1	2	3	4	5
Chandod-Dabhoi-Jambusar section—				
Chandod to Dabhoi	15-4-79	10·62		
Dabhoi to Goya Gate	1-7-80	17·00		
Goya Gate to Vishvamitri	24-1-81	1·63		
Vishvamitri to Padra	1-7-97	7·14		
Padra to Mobha	10-7-03	9·20		
Mobha to Masor Road	1-11-04	6·48		
Masor Road to Jambusar	1-5-17	6·88		
			58·95	
Jarod-Samlaya extension—				
Dabhoi to Jarod	15-11-13	23·83		
Jarod to Samlaya	13-12-15	5·41		
			29·24	
Bodeli Extension—				
Dabhoi to Sankheda Bahadarpur	17-9-79	9·64		
Sankheda Bahadarpur to Bodeli	16-6-90	12·44		
			22·08	
Miyagam branch—				
Dabhoi to Miyàgàm	8-4-73	20 00		
			20·00	
Masor extension—				
Miyàgàm to Malsar	15-1-12	23·67		
			23·67	
TOTAL OPEN MILEAGE	...	...	...	153·94
UNDER CONSTRUCTION OR SANCTIONED FOR CONSTRUCTION—				
Motipura to Tankhala (sanctioned on 25th February 1914)	...	26·29		
Samlaya *via* Savli to Timba (sanctioned on 24th April 1914)	...	33·34		
Choranda to Koral (sanctioned on 29th June 1917)	...	11·68		
			71·31	
				71·31
GRAND TOTAL	...	...	...	225·25

Details of construction—

Permanent-way.—The line is laid with 31-lb. flat-footed steel rails on wooden sleepers, but about 5 miles are laid with 41½ lb. rails about one mile of 28-lb. iron rails in the road. The Masor Road-Jambusar Miyagam-Malsar and Jarod Samlaya sections are laid with 30-lb. steel rails on wooden sleepers.

Ballast.—The line is ballasted chiefly with sand.

Fencing.—The line is practically unfenced except in station yards.

Curves.—The sharpest curve is of 500 feet radius.

Gradients.—The ruling gradient is 1 in 400, with small lengths of 1 in 200 and 1 in 300. On the Jarod-Samlaya section, it is 1 in 193 and on the Masor Road-Jambusar section, 1 in 1,000.

Agreements and contract—

Agreement, without date, having effect from the 1st January 1897, and as amended from time to time *between the Government of His Highness the Maharaja Gaekwar of Baroda and the Bombay, Baroda and Central India Railway Company*, as to the management, maintenance and working, by the Company, of the Dabhoi railway.

Contract, dated the 8th April 1907, *between the Secretary of State and the Bombay, Baroda and Central India Railway Company*, as to the management, maintenance and working, as from the 1st January 1906, of the Bombay, Baroda and Central India, the Rajputana-Malwa and other subsidiary lines.

Agreement, dated the 9th May 1916, *between the Government of His Highness the Maharaja Gaekwar of Baroda and the Bombay, Baroda and Central India Railway Company*, as to the management, maintenance and working, by the Company, of the Miyagam-Malsar, Dabhoi-Jarod, Jarod-Samlaya, Samlaya-Timba, Masor Road-Jambusar and the Motipura-Tankhala extensions from the dates they are or shall have been opened for public traffic, subject to modifications of the working agreement of the Dabhoi railway.

Main provisions of agreement and contract—

(i) *Land.*—
(ii) *Government aid.*— } As noted under Petlad-Cambay railway (Anand-Tarapur section) (5′ 6″ gauge).

(iii) *Terms of working.*—
(iv) *Distribution of profits.*— } The Company works the Dabhoi railway at actual cost, *plus* a sum equal to 10 per cent of total working expenses, but not less than Rs. 500 per mensem, for superintendence and lump sum payments, half yearly, for cost of working the Miyagam and Vishvamitri Junction stations; the railway is also debited with a contribution from its net earnings to the Company's Provident Fund calculated on the same basis as obtains on the Bombay, Baroda and Central India railway. The balance in favour of, or against, the Baroda Durbar is paid over to, or by it, as the case may be.

(v) *Rates and fares.*—
(vi) *Special obligations as to the conveyance of.*—
(*a*) Mails, troops, high Government officials and Government stores.—
(*b*) Government bullion and coin, and the persons in charge thereof.— } As noted under Petlad-Cambay railway (Anand-Tarapur section) (5′ 6″ gauge).

BOMBAY, BARODA AND CENTRAL INDIA RAILWAY SYSTEM—*contd.*

Gaekwar's Dabhoi railway (2′ 6″ gauge)—*concld.*

(vii) *Power of the Durbar to determine agreement.*— } The agreement may be terminated at any time
(viii) *Power of the Company to determine agreement.*— } on one year's notice from either side to expire on the 30th September or 31st March in any year.

(ix) *Term of contract* [*if not determined under* (vii) *and* (viii)].—Not specified.

Statistics of working—(Those for the periods prior to 1908 will be found in Appendix 38 to the Railway Administration Report for 1907.)

Year.	Mileage open at end of each year.	Total capital outlay, including suspense, to end of each year, *i.e.*, outlay on (*i*) lines open and (*ii*) lines partly or wholly under construction.	Gross earnings.	Net earnings.	Percentage of net earnings on total capital outlay given in column (3).	Earnings per mile per week.	Proportion of expenses to earnings.
1	2	3	4	5	6	7	8
	Miles.	Rs.	Rs.	Rs.		Rs.	
1908	94·48	25,94,874	4,66,069	2,44,526	9·42	95	47·53
1909	94·48	25,99,530	4,98,182	2,81,813	10·84	101	43·43
1910	94·48	31,41,668	5,95,304	3,46,177	11·01	121	41·85
1911	94·48	37,35,219	6,22,730	3,59,443	9·62	127	42·28
1912	118·15	42,85,146	6,07,931	3,31,317	7·73	100	45·50
1st qr. of 1913	118·15	34,52,598	1,57,000	71,910	2·08	102	54·20
1913-14	141·98	43,78,401	6,67,371	3,37,708	7·71	101	49·40
1914-15	141·98	47,94,372	6,91,539	3,27,126	6·82	94	52·70
1915-16	147·39	62,33,601	6,94,142	3,22,851	5·17	93	53·49
1916-17	147·06	77,72,164	7,40,713	3,72,716	4·80	97	49·68
1917-18	153·94	97,40,787	7,79,862	4,02,466	4·13	98	48·39

Kosamba-Zankhvav railway (2′ 6″ gauge)—

Progress in opening—

Sections of railway.	Date of opening.	Miles.	Total.	Grand total.
1	2	3	4	5
Kósambá to Zankhvav	1-5-12	26·10	26·10	
UNDER CONSTRUCTION OR SANCTIONED FOR CONSTRUCTION— Zankhvav to Bardipada (sanctioned on 23rd March 1914)	...	22·57	22·57	
GRAND TOTAL	...	...	...	48·67

Details of construction—

Permanent-way.—The permanent-way consists of 41½-lb. steel rails laid on jarrah and half-round jungle teak sleepers.

Ballast.—Metal ballast has been provided between stations and sand ballast in station yards.

Fencing.—No fencing has been provided.

Curves.—The sharpest curve is of 600 feet radius.

Gradients.—The ruling gradient is 1 in 200 with short lengths of 1 in 150, 1 in 125 and 1 in 100.

Agreement—

Dated the 6th December 1915, *between the Government of His Highness the Maharaja Gaekwar of Baroda and the Bombay, Baroda and Central India Railway Company*, as to the management, maintenance and working of the Kosamba-Zankhvav railway.

Main provisions of agreement—

As noted under Bilimora-Kalamba railway (2′ 6″ gauge).

Statistics of working—

Year.	Mileage open at end of each year.	Total capital outlay, including suspense, to end of each year, *i.e.*, outlay on (*i*) lines open and (*ii*) lines partly or wholly under construction.	Gross earnings.	Net earnings.	Percentage of net earnings on total capital outlay given in column (3).	Earnings per mile per week.	Proportion of expenses to earnings.
1	2	3	4	5	6	7	8
	Miles.	Rs.	Rs.	Rs.		Rs.	
1912	26·12	12,27,218	12,999	—11,207	...	14	186·21
1st qr. of 1913	26·12	12,69,586	6,152	— 4,272	...	18	169·42
1913-14	26·12	12,79,032	25,382	—12,545	...	19	149·42
1914-15	26·12	13,07,064	25,234	—14,379	...	19	156·98
1915-16	26·12	13,24,967	31,640	—12,987	...	23	141·05
1916-17	26·10	13,28,746	32,584	—34,742	...	24	206·62
1917-18	26·10	13,28,600	36,460	—10,472	...	27	128·72

BOMBAY, BARODA AND CENTRAL INDIA RAILWAY SYSTEM—*contd.*

Petlad-Vaso railway (2′ 6″ gauge)—

Progress in opening—

Sections of railway.	Date of opening.	Miles.	Total.
1	2	3	4
Petlad to Vaso	10-12-14	15·75	
Vaso to Pihij	17-4-15	3·50	
TOTAL	...	...	19·25

Details of construction—

Permanent-way.—The line is laid with 30-lb. flat-footed steel rails on wooden sleepers.

Ballast.—For the present the line is packed with moorum ballast. The Vaso-Pihij section is ballasted with gravel.

Fencing.—The line is unfenced, except in station yards.

Curves.—The sharpest curve is of 361 feet radius.

Gradients.—The ruling gradient is 1 in 500.

Agreements—

Dated the 17th November 1914, *between the Government of His Highness the Maharaja Gaekwar of Baroda and the Bombay, Baroda and Central India Railway Company*, as to the management, maintenance and working of the Petlad-Vaso railway.

Dated the 17th June 1915 (supplemental to the agreement of 1914), *between the Government of His Highness the Maharaja Gaekwar of Baroda and the Bombay, Baroda and Central India Railway Company*, as to the management, maintenance and working of the Vaso-Pihij extension, with effect from the 17th April 1915, as an integral part of the Petlad-Vaso railway.

Main provisions of agreement—

As noted under Bilimora-Kalamba railway (2′ 6″ gauge).

Statistics of working—

Year.	Mileage open at end of each year.	Total capital outlay, including suspense, to end of each year, *i. e.*, outlay on (*i*) lines open, and (*ii*) lines partly or wholly under construction.	Gross earnings.	Net earnings.	Percentage of net earnings on total capital outlay given in column (3).	Earnings per mile per week.	Proportion of expenses to earnings.
1	2	3	4	5	6	7	8
	Miles.	Rs.	Rs.	Rs.		Rs.	
1914-15 ...	15·50	6,71,440	9,293	2,116	0·32	38	77·23
1915-16 ...	19·03	7,69,122	54,066	12,862	1·67	55	76·21
1916-17 ...	19·25	8,79,735	60,805	20,007	2·27	61	67·10
1917-18 ...	19·25	8,99,964	65,219	21,305	2·37	65	67·33

Rajpipla State railway (2′ 6″ gauge)—

Progress in opening—

Sections of railway.	Date of opening.	Miles.	Total.	Grand total.
1	2	3	4	5
Anklesvar to Raj-Pardi	1-7-97	19·13		
Raj-Pardi to Umalla	19-1-99	4·95		
Umalla to Amletha	1-6-99	7·85		
Amletha to Nándod Station	20-7-99	5·57		
Nandod Station to Nandod Town	10-11-17	1·74		
TOTAL OPEN MILEAGE	...	...	39·24	

Details of construction—

Permanent-way.—The line is laid with 41¼-lb. flat-footed steel and iron rails on half-round jungle teak sleepers.

Ballast.—The line is ballasted chiefly with coarse river sand.

Fencing.—Only the station yards and small lengths at miles 4 and 9 are fenced.

Curves.—The sharpest curve is of 1,432 feet radius.

Gradients.—The ruling gradient is 1 in 150. Between Nandod Station and Nandod Town it is 1 in 100.

BOMBAY, BARODA AND CENTRAL INDIA RAILWAY SYSTEM—*concld.*

Rajpipla State railway (2′ 6″ gauge)—*concld.*

Contract and agreement—

Agreement, dated the 19th March 1900, *between the Rajpipla State and the Bombay, Baroda and Central India Railway Company*, as to the maintenance and working of the Rajpipla State railway.

Contract, dated the 8th April 1907, *between the Secretary of State and the Bombay, Baroda and Central India Railway Company*, as to the management, maintenance and working, as from the 1st January 1906, of the Bombay, Baroda and Central India, the Rajputana-Malwa and other subsidiary lines.

N.B.—A revised agreement, which shall be held to have come into force from the 10th November 1917 superseding the agreement of 19th March 1900, is under consideration.

Main provisions of agreement and contract—

(i) *Land.*—Provided free of cost by the Rajpipla State.

(ii) *Government aid.*—The line is the property of the Rajpipla State (which provides all funds chargeable to the capital account), and is managed, maintained, stocked and worked by the Bombay, Baroda and Central India railway as part of the Company's system.

(iii) *Terms of working.*—
(iv) *Distribution of profits.*— } The Rajpipla State railway is debited with the actual cost of working and a share of the working expenses at Anklesvar Junction, *plus* a sum equal to 12½ per cent. on total working expenses in the half-year for supervision, but such supervision shall not be levied unless the net earnings of the Rajpipla State railway give a clear return of 3½ per cent per annum on the capital cost of the line, and then only to the extent that the balance of the net earnings may permit after a clear return of 3½ per cent per annum has been allowed to the Rajpipla State railway on the total capital expended, and in addition thereto a contribution from its net earnings to the Company's Provident Fund calculated on the same basis as obtains on the Bombay, Baroda and Central India railway. The balance in favour of, or against, the Rajpipla State is paid over to, or by it, as the case may be.

(v) *Rates and fares.*—Are to be fixed from time to time by the Company in communication with and subject to the approval of His Highness' Government.

(vi) *Special obligations as to the conveyance of.*— } As under Petlad-Cambay railway (Anand-Tarapur section).
(*a*) Mails, troops, high Government officials and Government stores.
(*b*) Government bullion and coin, and the persons in charge thereof.

(vii) *Power of the Rajpipla State to determine agreement.*—
(viii) *Power of the Company to determine agreement.*— } The agreement may be determined by either party, at the end of any financial half-year on one year's notice from either side.

(ix) *Term of agreement* [*if not determined under* (vii) *and* (viii)].—Not specified.

Statistics of working—(Those for the periods prior to 1908 will be found in Appendix 38 to the Railway Administration Report for 1907)

Year.	Mileage open at end of each year.	Total capital outlay, including suspense, to end of each year, *i.e.*, outlay on (*i*) lines open and (*ii*) lines partly or wholly under construction.	Gross earnings.	Net earnings.	Percentage of net earnings on total capital outlay given in column (3).	Earnings per mile per week.	Proportion of expenses to earnings.
1	2	3	4	5	6	7	8
	Miles.	Rs.	Rs.	Rs.		Rs.	
1908 . . .	37·37	13,53,352	81,269	27,482	2·03	42	66·18
1909 . . .	37·37	13,61,118	83,439	28,888	2·12	43	65·38
1910 . . .	37·37	13,64,149	1,02,324	41,189	3·02	53	59·75
1911 . . .	37·37	13,90,221	1,23,490	54,836	3·94	64	55·59
1912 . . .	37·37	13,90,293	1,19,151	44,460	3·20	61	62·69
1st qr. of 1913 .	37·37	14,13,423	43.567	24,677	1·75	90	43·36
1913-14 . .	37·37	14,18,501	1,29,663	45,365	3·20	67	65·01
1914-15 . .	37·37	14,29,469	1,28,585	49,678	3·48	66	61·37
1915-16 . .	37·37	14,72,251	1,28,696	58,794	3·99	66	54·32
1916-17 . .	37·50	16,26,463	1,18,809	50,529	3·11	61	57·47
1917-18 . .	39·24	17,13,068	1,35,561	49,849	2·91	66	63·23

Navsari-Kamrej Light railway (2′ 6″ gauge)—

Sanction to the construction of this steam tramway by the Baroda Durbar was conveyed in the Foreign and Political Department letter No. 185-1-B., dated the 4th February 1914.

Progress in opening—

Section of railway.	Date of opening.	Miles.	Total.
1	2	3	4
Navsari *vid* Palsana to Kamrej (sanctioned on 4th February 1914)	...	20·00	20·00

BOMBAY PORT TRUST RAILWAY (5′ 6″ gauge)—

The railway serves all the Docks of the Port of Bombay and also the Bunders on the east of the Island north of the Ballard Pier, as well as various depôts allotted to certain trades, and is used for goods and troop traffic only.

It consists of a double line track for its whole length, as well as of reception and sorting yards, depôts stations, and numerous sidings in the docks.

Sanction to the construction of this line by the Bombay Port Trust was conveyed in Railway Board's Notification No. 152, dated the 28th May 1913, and at the end of March 1918, 105 miles of track were laid and connected up.

Progress in opening—

Sections of railway.	Date of opening.	Miles.	Total.
1	2	3	4
Wadala Junction to Victoria Overbridge	1-1-15	7·40	
Victoria Overbridge to Docks	1-2-15	6·34	
TOTAL ...	...	...	13·74

Details of construction—

Permanent-way.—The tracks are laid throughout with 75-lb. flat-footed steel rails on wooden sleepers principally jarrah, teak and sâl with spike fastenings.

Ballast.—As the greater part of the railway is laid on newly reclaimed ground, moorum ballast is used extensively for packing and boxing, and will be used until such time as it is considered that a firm formation has been obtained. On old ground blue stone trap ballast is provided. Over several parts of the Sewri-Mazagon reclamation it was found necessary to carry the rails on wooden mattresses owing to severe settlement. The largest mattress is 900 feet long.

Fencing.—The line is being fenced where necessary.

Curves.—The radius of the sharpest curve is 800 feet outside the dock area and 500 feet within the docks.

Gradients.—The steepest grade on the line is 1 in 277, near the Nawab Tank bridge.

Contract—
Main provisions of contract— } Nil. The line is owned and worked by the Bombay Port Trust.

Statistics of working—Not available.

CALCUTTA PORT COMMISSIONERS' RAILWAY (5' 6" gauge)—

The railway serves the godowns, warehouses, jetties, workshops, jute, sugar, tea, rice and grain depôts, timber yards, mills and coal depôts on both the Calcutta and Howrah Foreshores, and is used for only goods traffic. The railway consists of single and double tracks, and there are a large number of sidings for crossing trains and loading goods. The mileage of track including all sidings amounts to 154·28.

The first section, from Chandpal Ghât to Kidderpore Docks, was laid in 1886, being included in the general sanction for the Docks, and was used solely for the carriage of material for the construction of the Docks. It was opened to general goods traffic in 1891.

Progress in opening—

Sections of railway.	Date of opening.	Miles.	Total.	Grand total.
1	2	3	4	5
Lines on the Calcutta Foreshore—				
Main line—				
Cossipore (Gun Foundry Road) to Bagh Bazar	1-6-78	1·14		
Bagh Bazar to Meerbohur Ghât	11-1-75	1·76		
Meerbohur Ghât to Jetties	1-6-78	0·84		
Jetties to Chandpal Ghât	1-12-80	0·32		
Chandpal Ghât to Kidderpore Docks (Graving Dock)	1-1-87	2·16		
Graving Dock to Chetla	0-0-93	3·20		
			9·42	
Branches—				
Graving Dock to Majherat	0-0-93	2·34		
Dock Junction to Bengal-Nagpur railway junction	0-0-01	1·35		
Shapore to Garden Reach Jetties	2-7-16	2·13		
			5·82	
Line on the Howrah Foreshore—				
Telkul Ghât *vid* Bhurpara Khal to Shalimar	31-12-01	...	2·23	
GRAND TOTAL	...	...	...	17·47

Details of construction—

Permanent-way.—The Cossipore-Chandpal Ghât section is laid with steel rails weighing 75 lbs. and 60 lbs. to the yard on wooden sleepers. The Chandpal Ghât-Kidderpore Dock section is laid with 75-lb. double-headed and flanged rails on wooden sleepers and partly with East Indian railway second-hand material on wooden sleepers. The Shalimar branch is laid with 75-lb. double-headed steel rails on cast iron chairs and flanged rails spiked on sâl sleepers. The Dock section is laid with 60-lb. and 75-lb. flanged and double-headed rails laid on wooden sleepers.

Ballast.—On the Cossipore-Chandpal Ghât section, packing and boxing is generally done with coal cinders and in some places with 1st class ballast. The Chandpal Ghât-Kidderpore Dock section is packed with brick ballast. On the Shalimar branch, packing is done with 1st class *jhama* ballast.

Fencing.—The line is fenced throughout. The Chandpal Ghât-Kidderpore Dock section is fenced on both sides.

Curves.—The radius of the sharpest curve is 250 feet.

Gradients.—The ruling gradient on the greater part of the railway is 1 in 300, except where the line passes under the Howrah bridge approach, where the gradient is 1 in 80 and between Hastings bridge and Watgunge where the gradient is 1 in 190.

Contract—

Nil. The line was constructed by the Port Commissioners out of Port Trust Funds and is maintained and worked by them. The land from Chandpal Ghât to Ahiritollah Ghât was originally transferred to the Commissioners by Government for which the former pay a quit rent of Rs. 37,292 per annum. The land north of Ahiritollah Ghât was acquired by the Commissioners under the Land Acquisition Act and that south of Chandpal Ghât was transferred by Government to the Commissioners.

Statistics of working—Not available.

EASTERN BENGAL RAILWAY SYSTEM.

The lines owned by the late Eastern Bengal Guaranteed Railway Company were acquired by the State on the 1st July 1884, with which the Northern Bengal State and the Calcutta and South Eastern railways were amalgamated for working by the State as one undertaking under the name of the Eastern Bengal railway.

Date of registration of the late guaranteed company.—1857.

Lines comprised in the system.—The Eastern Bengal railway system is made up of—

	Open line. Miles.	Under construction or sanctioned for construction. Miles.	Total. Miles.
(*a*) Eastern Bengal railway (5′ 6″ gauge)	569·26	...	569·26
(*b*) Sara-Sirajganj railway ((5′ 6″ gauge)	53·12	...	53·12
(*c*) Eastern Bengal railway (3′ 3½″ gauge)	977·72	...	977·72
(*c*) Eastern Bengal railway (2′ 6″ gauge)	35·10	...	35·10
(*d*) Cooch Behar State railway (3′ 3½″ gauge)	33·09	....	33·09
(*e*) Mymensingh-Jamalpur-Jagannathganj railway (3′ 3½″ gauge)	56·05	...	56·05
(*f*) Khulna-Bagirhaut railway (2′ 6″ gauge)	...	19·66	19·66
Total	1,724·34	19·66	1,744·00

Running powers—

Foreign line over home line :—

East Indian railway, Naihati to Chitpore Sealdah and Majherat	36·88
Assam-Bengal railway Tangi to Narayanganj	23·00
	59·88

Eastern Bengal railway (5′ 6″ gauge)—

Progress in opening.—

Sections of railway.	Date of opening.	Miles.	Total.	Grand total.	Remarks.
1	2	3	4	5	6
EASTERN SECTION—					
Main line—					
Calcutta to Ranaghat	29-9-62	45·74			
Ranaghat to Poradaha Junction	15-11-62	57·12			
Poradaha Junction to Bhairamara	19-1-78	11·73			
Bhairamara to Shakhole (3 miles south of Gopalpur)	1-1-15	14·41			
Shakhole (3 miles south of Gopalpur) to Santahar	1-11-14	44·63			
Branches—			173·63		
Kakurgachi chord—					
Kakurgachi Road to Gobra	1-2-07	2·26	2·26		
Chitpore Terminus extension—					
Belgachhi bridge to Cossipor	1-3-03	*0·68			
	1-9-03	*0·98	1·66		
Dum Dum-Chitpore low level connection—	10-12-13	*1·18			
	20-10-14	*1·66	2·84		* For goods traffic only.
Pattipooker-Chitpore connection	4-12-10	*1·17	1·17		
Murshidabad branch—					
Ranaghat to Bhagwangola	1-9-05	88·85			
Bhagwangola to Krishnapur	10-11-05	5·90			
Krishnapur to Lalgola Ghat	15-7-07	0·22	94·97		
Goalundo extension—					
Poradaha Junction to Jagati Junction	15-11-62	4·28			
Jagati Junction to mile 145·74	1-1-71	37·87			
	20-6-11	0·73			
Mile 145·74 to Pachooria Junction	1-4-90	3·16			
Pachooria Junction to Goalundo	22-10-93	5·00			
	27-11-17	5·53	56·57		
Kushtia loop—					
Jagati Junction to Kushtia	16-2-64	3·77			
Kushtia to Kaligunga Junction	1-8-81	1·33	5·10		
Faridpur branch—					
Pachooria Junction to Shivarampore	20-10-93	8·77			
Shivarampore to Faridpur	9-4-99	5·14	13·91		
Durgapur Ghat line—	1-7-07	* 4·51	4·51		
Fakirabad Ghat line	5-7-12	3·45	3·45		
Raita Branch—					
Bhairamara to Raita	1-12-16	9·29	9·29		
Churni extension—	1-1-02	1·50	1·50		
TOTAL, EASTERN SECTION, CARRIED OVER	...	...	...	370·86	

EASTERN BENGAL RAILWAY SYSTEM—*contd.*

Eastern Bengal railway (5′ 6″ gauge)—*contd.*

Progress in opening—*contd.*

Sections of railway.	Date of opening.	Miles.	Total.	Grand total.	Remarks.
1	2	3	4	5	6
Brought forward, Eastern section	...	...	...	370·86	
SOUTHERN SECTION—					
Main line—					
Calcutta (Beliaghata) to Sonarpur	2-1-62	10·00			
Sonarpur to Baruipur	10-6-82	5·30			
Baruipur to Magra Hat	18-12-82	9·55			
Magra Hat to Diamond Harbour	25-4-83	12·69			
Diamond Harbour towards Hara Fort	25-4-83	*0·42			
			37·96		*For goods traffic principally, occasionally used for troops special.
Branches—					
Canning branch—					
Sonarpur to Champahati	2-1-62	5·00			
Champahati to Port Canning	15-5-63	12·79			
Bansra diversion extension	5-3-00	0·25			
	17-11-02	0·81			
			18·85		
Budge-Budge branch—					
Ballygunge to Budge-Budge	1-5-90	13·66			
			13·66		
TOTAL, SOUTHERN SECTION	...	...	...	70·47	
CENTRAL SECTION—					
Main line—					
Dum Dum Junction to Dattapukur	2-4-83	14·25			
Dattapukur to Gobardanga	7-12-83	17·00			
Gobardanga to Bongong	22-4-84	12·00			
Bongong to Khoolna	16-2-84	61·25			
			104·50		
Branches—					
Ranaghat to Bongong	16-10-82	20·75			
Dum Dum Cantonment to Pattipooker	1-8-84	2·68			
			23·43		
TOTAL, CENTRAL SECTION	...	...	...	127·93	
TOTAL OPEN MILEAGE	...	...	...	569·26	
QUADRUPLE LINE—					
On the main line of Eastern section—					
Sealdah to Kakurgachi	18-2-16	0·79			
Kakurgachi to Dum Dum	1-2-07	3·13			
Dum Dum to Barrackpore	12-12-12	10·30			
Barrackpore to Kankinara	21-11-12	7·25			
			21·47		
				21·47	
TRIPLE LINE—					
On the main line of Eastern section—					
Naihati to Halishahar	11-11-14	1·69	1·69		
				1·69	
DOUBLE LINE—					
On the main line of Eastern section—					
Kankinara to Naihati	1-8-86	1·76			
	21-3-87	0·26			
Naihati to Kanchrapara	20-4-92	†3·00			†Excluding the triple length.
Kanchrapara to Ranaghat	12-11-92	17·56			
Ranaghat to Aranghata	7-8-97	5·50			
Aranghata to Bogoola	17-9-97	6·75			
	3-11-97	6·65			
Bogoola to Shibnibash	17-11-98	0·75			
	29-11-09	0·15			
Shibnibash to Dursuna	17-9-97	9·50			
Dursuna to Poradaha	7-8-97	27·58			
	27-11-09	0·24			
Poradaha to Bhairamara	17-10-13	6·73			
	25-1-15	5·00			
Bhairamara to Ishurdi Junction	25-2-15	10·52	101·95		
On the branches of Eastern section—					
Kakurgachi Chord—					
Kakurgachi to Gobra	1-2-07	2·26			
			2·266		
Chitpore branch, a portion	13-4-88	0·82			
			0·82		
Dum Dum-Chitpore low level connection	10-12-13	1·18			
	20-10-14	1·66			
			2·84		
Total carried over	...	...	107·87		

EASTERN BENGAL RAILWAY SYSTEM—*contd.*

Eastern Bengal railway (5′ 6″ gauge)—*contd.*

Progress in opening—*concld.*

Sections of railway.	Date of opening.	Miles.	Total.	Grand total.	Remarks.
1	2	3	4	5	
Double Line—*concld.*					
Brought forward .	...	...	107·87		
Pattipooker-Chitpore connection	20-10-14	1·17	1·17		
Goalundo extension—					
Poradaha Junction to Jagati Junction . .	2-3-15	4·28	4·28		
On the main line of Southern section—					
Sealdah to Ballygunge	20-10-88	3·50			
	19-9-90	0·36			
Ballygunge to Jadabpur	10-10-13	1·35			
Jadabpur to Barnipur	23-11-15	10 39			
On the branches of Southern section—			15·60		
Budge-Budge branch—					
Ballygunge to Majherat.	20-11-93	4·00	4·00		
Total double line .	...	...	...	132·92	

Details of construction—

Permanent-way.—The permanent-way consists mostly of steel rails and sleepers of wood and iron. The steel rails are of various types: (*i*) 90-lb. flat-footed laid on (*a*) the new double goods track between Dum Dum Junction and Kankinara, and between Sealdah and Kakurgachi, (*b*) the up and down tracks between Kankinara and Ishurdi and Poradaha and Jagati, (*c*) the track between Ishurdi and Santahar, (*d*) the line from Jagati Junction *via* Kushtia Chord, to Faridpur and the Kushtia loop line, (*e*) the Murshidabad branch between Ranaghat and Krishnagar city, (*f*) the up and down tracks on the Pattipooker-Chitpore connection, from Pattipooker to sub-way at Canal Junction Cabin, (*g*) the up and down tracks on the low level line between Dum Dum and Canal Junction, (*h*) the whole of the Central section; and (*i*) the up and down tracks between Beliaghata and Tiljala and between Ballyganj and Baruipur and the single line between Baruipur and Diamond Harbour and between Sonarpur and Taldi; (*ii*) 85-lb. bull-headed laid on (*a*) the original double line between Calcutta and Kankinara, (*b*) the new double track between Dum Dum and Kakurgachi and (*c*) the up and down tracks between Kakurgachi and Majherat *viâ* Tiljala; (*iii*) 75-lb. double-headed laid on the third track between Naihati and Halishahar; (*iv*) 75-lb. new pattern flat-footed laid on the Murshidabad branch between Krishnagar city and Lalgolaghat; (*v*) 73-lb. double headed laid on the Southern section between Taldi and Canning and Majherat and Budge Budge,; and (*vi*) second-hand 62-lb. flat-footed laid on the Churni Extension.

The line from sub-way at Canal Junction Cabin to Chitpore, is laid partly with 75-lb. double-headed and partly with 75-lb. flat-footed rails. A few short lengths near ghat stations at Goalundo are still laid with old iron permanent-way.

All flat-footed rails, as a rule, are laid on wooden sleepers, excepting for a few short lengths between Naihati and Poradaha where cast iron sleepers have been used under 90-lb. rails. The 85-lb. bull-headed rails are laid on the Denham and Olphert's sleepers, with wooden sleepers at joints and continuous joint pattern combined chair-fish plates, or on Denham and Olphert's cast iron sleepers, with wooden sleepers and cast iron chairs with wooden keys at joints. The 75-lb. double-headed rails are laid on the ordinary cast iron or on Denham and Olphert's cast iron sleepers. The 73-lb. double headed rails are laid on Denham and Olphert's cast iron or on wooden sleepers with cast iron chairs and wooden keys.

Ballast.—On the main line of the Eastern section, from Bhairamara to Shakhole, the line is ballasted with broken trap and onward to Santahar with shingle. Where 85-lb. bull-headed rails have been laid, brick ballast has been replaced by stone. The ballast on the lengths relaid with 90-lb. rails is also being gradually replaced with stone. The bottom ballast on the Murshidabad branch is brick and the ballasting is being completed with stone. The second tracks between Poradaha and Bhairamara and Poradaha and Jagati are ballasted with broken trap and shingle, respectively. The new double goods track between Kankinara and Dum Dum is fully ballasted with shingle. The new second track between Ballygunge and Baruipur on the Southern section is mainly ballasted with brick. The Canning branch is practically unballasted and the Faridpur branch only at the bridges.

Fencing.—The whole of the Eastern section is fenced, except between Pachooria Junction and Goalundo and the Faridpur branch. The Southern section is fenced except the Canning branch. The Central section is fenced throughout.

Curves.—The sharpest curve is of 1,000 feet radius.

Gradients.—The ruling gradient is 1 in 300; except between miles 160 and 162 on the Faridpur branch, where it is 1 in 100. There is also a short length of 1 in 200 grade on the low level approaches to Chitpur from Dum Dum junction.

EASTERN BENGAL RAILWAY SYSTEM—*contd*

Eastern Bengal railway (5′ 6″ gauge)—*concld.*

Contracts.—

Nil.—The line is owned and worked by the State.

Rates and fares.—Certain maxima and minima have been fixed by the Government, between the limi of which the Railway Administration can vary the rates and fares for goods and coaching traffic.

Statistics of working.—(Those for the periods prior to 1888 will be found in Appendix 38 to the Railway Administration Reportfor 1907)—

INCLUDES THE EASTERN BENGAL RAILWAY 3′ 3⅜″ AND 2′ 6″ GAUGE SECTIONS.

Year.	Mileage open at end of each year.	Total capital outlay, including suspense, to end of each year, *i.e.*, outlay on (*i*) lines open and (*ii*) lines partly or wholly under construction.	Gross earnings.	Net earnings.	Percentage of net earnings on total capital outlay given in column (3).	Interest.	Annuity.	Gain or loss to the State *pertaining to each year.*	Earnings per mile per week.	Proportion of expenses to earnings.
1	2	3	4	5	6	7	8	9	10	11
	Miles.	Rs.	Rs.	Rs.		Rs.	Rs.	Rs.	Rs.	
1888 .	673·21	9,36,48,486	1,05,19,210	55,25,424	5·90	28,83,744	20,11,011	+6,30,669	283	47·47
1889 .	746·40	9,73,16,143	1,11,76,674	61,91,625	6·36	30,18,703	20,43,953	+11,28,969	282	44·60
1890 .	763·90	10,04,93,109	1,14,78,382	60,70,323	6·04	30,96,150	18,14,110	+11,60,063	271	47·12
1891 .	776·57	10,19,64,737	1,26,75,440	65,32,100	6·40	32,01,166	19,48,198	+13,82,736	294	48·47
1892 .	812·35	10,48,66,143	1,15,56,446	62,33,727	5·94	33,53,707	21,86,396	+ 6,93,624	270	46·06
1893 .	812·71	10,56,47,715	1,20,51,147	66,35,138	6·28	33,88,241	22,14,254	+10,32,643	283	44·94
1894 .	812·96	10,61,71,400	1,40,15,726	83,53,559	7·87	34,72,411	25,21,063	+23,60,085	314	40·40
1895 .	813·65	10,76,16,616	1,45,09,789	89,74,474	8·34	35,12,105	25,10,875	+29,51,494	328	38·15
1896 .	814·39	11,02,05,096	1,50,81,670	90,02,286	8·17	35,15,387	23,46,898	+31,40,001	344	40·31
1897 .	817·88	11,51,93,689	1,47,62,233	80,66,993	7·00	37,20,343	22,13,438	+21,33,212	336	45·35
1898 .	827·37	11,82,79,103	1,47,17,879	83,35,064	7·05	38,62,725	21,01,651	+23,70,688	334	43·37
1899 .	832·18	12,20,74,261	1,56,12,436	83,01,083	6·80	39,79,133	20,83,534	+22,38,416	348	46·83
1900 .	843·04	12,62,77,100	1,71,00,460	92,46,424	7·32	41,82,033	20,87,252	+29,77,139	376	45·93
1901 .	854·39	13,24,19,708	1,65,99,440	83,08,281	6·27	43,55,321	20,93,467	+18,59,493	360	49·95
1902 .	898·18	14,04,06,863	1,78,93,098	91,48,340	6·52	46,69,423	20,88,413	+23,90,504	381	48·87
1903 .	897·87	15,21,86,102	1,81,52,429	88,57,094	5·82	50,13,335	20,87,434	+17,56,325	375	51·20
1904 .	971·31	16,55,23,769	1,94,63,098	88,23,372	5·33	54,62,375	20,87,434	+12,39,966*	374	54·67
1905 .	1,234·98	19,08,88,052	2,03,73,194	96,19,904	5·04	59,23,924	20,87,434	+16,08,546	348	52·78
1906 .	1,271·29	20,23,66,593	2,46,31,081	1,06,08,661	5·24	68,54,092	20,87,434	+16,67,135	360	56·93
1907 .	1,273·61	21,54,21,452	2,65,68,569	1,03,15,781	4·79	63,94,610	20,87,434	+18,33,737	389	61·17
1908 .	1,274·47	22,87,26,095	2,73,15,420	81,99,105	3·58	70,30,092	20,87,434	—9,18,421	412	69·98
1909 .	1,503·09	24,27,44,601	2,77,24,064	97,10,666	4·00	73,15,941	20,87,434	+3,07,291	355	64·97
1910 .	1,507·73	25,55,91,026	2,83,74,562	1,16,98,257	4·58	75,34,551	20,87,434	+20,76,272	366	58·77
1911 .	1,509·62	27,11,51,904	3,15,19,633	1,17,55,233	4·33	79,48,531	20,87,434	+17,19,268	402	62·70
1912 .	1,569·83	29,00,69,252	3,43,33,589	1,39,40,687	4·81	84,00,069	20,87,434	+34,53,184	429	59·40
1st qr. of 1913.	1,571·68	27,69,63,503	89,52,207	34,79,977	1·26	21,70,558	5,21,859	+7,87,560	438	61·13
1913-14 .	1,581·43	32,69,88,602	3,75,42,065	1,66,52,046	5·09	1,04,87,669	20,87,434	+40,76,943	460	55·64
1914-15 .	1,639·05	35,01,65,002	3,32,49,234	1,14,97,734	3·28	1,12,22,488	20,87,434	—18,12,188	401	65·42
1915-16 .	1,638·91	35,98,80,436	3,48,23,835	1,37,75,460	3·83	1,17,12,779	20,87,434	—24,753	409	60·44
1916-17 .	1,627·88	36,29,18,133	3,69,89,330	†1,68,75,235	4·68	1,15,44,512	19,68,750	+83,61,973	437	54·38
1917-18 .	1,582·08	36,53,74,519	3,47,38,908	†1,46,36,653	4·08	1,22,11,218	19,75,155	+4,50,280	405	57·87

*Excluding Rs. 33,597, representing payment made to the Brahmaputra Sultanpur Branch Railway Company up to 1st A ril 1904 on account of surplus profits and other adjustments.

† Excluding payments made to the Darjeeling Himalayan Railway extensions and Sara Sirajganj Railway on account of rebate.

Sara-Sirajganj railway (5′ 6″ gauge)—

Date of registration of the Company—1913.

The construction of this line by the Eastern Bengal railway on behalf of the Sara-Sirajganj Railway Company was sanctioned in Railway Board's Notification No. 277, dated the 10th October 1913. The line takes off at Ishurdi in an easterly direction and terminates at Sirajganj on the banks of the Jamuna, which is the local name for the Brahmaputra river.

Progress in opening—

Sections of railway.	Date of opening	Miles.	Total.
1	2	3	4
Ishurdi to Bhangoora	1-7-15	21·25	
Bhangoora to Sirajganj Bazar.	25-7-16	28·41	
Sirajganj to Sirajganj Ghat	17-12-16	3·46	
TOTAL .	...	...	53·12

EASTERN BENGAL RAILWAY SYSTEM—*contd.*

Sara-Sirajganj railway (5′ 6″ gauge)—*contd.*

Details of construction—

Permanent-way.—The permanent-way consists of 90-lb. flat-footed steel rails laid on sâl and jarrah sleepers on the main line and passenger sidings and on old steel trough sleepers on the goods sidings. The permanent way on the Sirajganj Ghat line consists of 75 lb. double headed and flat-footed rails laid mostly on wooden sleepers.

Ballast.—The ballast consists of sandy earth just sufficient to pack the line for running.

Fencing.—The line is unfenced.

Curves.—The sharpest curve is of 5,730 feet radius.

Gradients.—The ruling gradient is 1 in 300.

tract—

Dated the 14th April 1916, *between the Secretary of State for India and the Sara-Sirajganj Railway Company,* as to the construction, maintenance and working of the Sara-Sirajganj railway, by the agency of the Eastern Bengal railway.

n provisions of contract—

(i) *Land.*—Land in British territory provided by Government free of cost.

ii) *Government-aid.*—For the more convenient and economical construction of the railway, its execution was undertaken by the Government, who also stock, manage, maintain and work it through the agency of the Eastern Bengal railway. The Government agree to allow to the Company, in respect of each year, by way of rebate, such a sum, not exceeding in any year the net earnings from traffic interchanged between the Eastern Bengal railway and the Company's railway, as shall, together with the net earnings of the Company for the said year, make up an amount equal to interest for such year at a rate of 5 per cent. per annum on the share capital of the Company for the time being paid up and shall also allow Rs. 15,000 per annum and such other actual expenses as may be incurred by the Company for or towards office expenses and expenses of management and direction of the Company and also such legal expenses as shall have been approved by the Secretary of State.

iii) *Terms of working.*—For management, maintenance, working and the use of rolling-stock, the Eastern Bengal railway shall retain, every half-year, a percentage of the gross earnings of the Sara-Sirajganj railway, which shall bear the same proportion to the gross earnings of the said railway, as the working expenses of the Eastern Bengal railway, including the said railway bear to the gross earnings of the Eastern Bengal railway, including the said railway, up to a maximum of 50 per cent.

iv) *Distribution of profits.*—If the net earnings exceed 5 per cent. on the paid up share capital of the Company, the office expenses and expenses of management of the Company, as at (ii) above, shall be a first charge on the surplus profits and the balance of the profits shall be divided equally between the Secretary of State and the Company; provided that if the surplus profits are insufficient to meet the administration charges the balance will be paid to the Company by the working agency out of the stipulated percentage of the earnings retained by the working agency as working expenses.

(v) *Rates and fares.*—Same as on the Eastern Bengal railway.

(vi) *Special obligations as to the conveyance of.*—

(*a*) Mails, troops, police, high Government officials and Government stores—
(*b*) Government bullion and coin and the persons in charge thereof— } None specified.

(vii) *Power of the Government to determine contract.*—The Government may determine the contract, by giving 12 months' "notice of purchase", either on the 30th September 1946, or on the 31st day of March in the last year of any subsequent period of ten years, in which case the Government undertake to pay to the Company, within 4 months from the date of the determination of the contract, a sum equal to 25 times the amount of the average yearly net earnings of the Company's line (excluding payments on account of rebate) derived during the three years preceding the time at which the contract is determined, provided that the total amount so payable to the Company does not exceed 20 per cent the total capital expenditure of the Company or is less than such capital expenditure.

The contract may also be determined by giving to the Company 12 months' "notice of special purchase" in the following cases:—

(*a*) When the Secretary of State considers it desirable that the gauge of the said railway should be altered.
(*b*) When it is desired to convert the said railway into a line of through communication.
(*c*) When the Secretary of State desires to extend the said railway and the Company does not, within six months from date of formal requisition from the Secretary of State, raise such additional capital as is necessary for this purpose.

If the contract be determined by "notice of special purchase", the Government undertakes to pay to the Company 25 times the average net earnings of the Company's line (excluding payments on account of rebate) derived by the Company during the three years preceding the time at which the contract is determined or 115 per cent. of the total capital expenditure of the Company whichever may be the greater.

(viii) *Power of the Company to surrender contract.*—Nil.

(ix) *Term of contract if not determined under* (*vii*).—None specified.

EASTERN BENGAL RAILWAY SYSTEM—*contd.*

Sara-Sirajganj railway (5′ 6″ gauge)—*concld.*

Statistics of working—

Year.	Mileage open at the end of each year.	Total capital outlay, including suspense, to the end of each year, *i.e.*, outlay on (i) lines open and (ii) lines partly or wholly under construction.	Gross earnings.	Net earnings.	Percentage of net earnings on total capital outlay given in column (3).	Rebate from the Eastern Bengal railway.	Total income.	Percentage of total income on total capital outlay given in column (3).	Earnings per mile per week.	Proportion of expenses to earnings.
1	2	3	4	5	6	7	8	9	10	11
	Miles.	Rs.	Rs.	Rs.		Rs.	Rs.		Rs.	
1915-16 . .	22·37	76,48,161	...	*	...	...	...	...	...	...
1916-17 . .	52·93	86,79,657	1,31,780	65,890	0·76	100401	1,66,291	1·92	96	50·00
1917-18 . .	53·12	86,48,504	2,68,182	1,34,091	1·55	1,97,138	3,31,229	3·83	97	50·00

* Credited to capital.

Eastern Bengal railway (3′ 3¾″ gauge)—

Progress in opening—

Sections of railway.	Date of opening.	Miles.	Total.	Grand total.	Remarks.
1	2	3	4	5	6
Main line—					
Manihari to Katihar	1-4-87	13·04			
Junction with the Bengal and North-Western railway at Katihar.	8-3-01	0·69			* The line between Teesta Junction and Mogalhat was originally opened on the 2′ 6″ gauge as a part of the Kaunia-Dharlla (2′ 6″ gauge) branch on 6th February 1882.
Katihar to Rayganj	1-7-89	37·49			
Rayganj to Dinagepore	15-2-88	32·68			
Dinagepore to Chirir Bandar	16-5-84	8·75			
Chirir Bandar to Parbatipur Junction	1-7-83	9·89			
Parbatipur Junction to Shampur	19-5-78	15·74			
Shampur to Rungpore	2-7-78	7·50			
Rungpore to Kaunia	1-6-79	11·25			
Kaunia to Mogalhat (including Teesta Bridge)*	1-4-01	17·19			
Mogalhat to Gitaldaha Junction	2-1-02	1·86			
Gitaldaha to Golakganj	23-9-02	24·33			
Golakganj to Kokrajhar	1-2-06	35·75			
Kokrajhar to Sorbhog	1-3-09	39·73			
Sorbhog to Amingaon (on the right bank of the Brahmaputra).	1-4-09	67·27			
Pandu (on the left bank of the Brahmaputra) to Gauhati.	1-1-10	5·00			
			328·1		
Santahar-Siliguri section—					
Santahar Junction to Jalpaiguri	28-8-77	121·29			
Jalpaiguri to Siliguri	10-6-78	23·75			
			145·04		
Santahar-Kaunia loop—					
Santahar to Bogra	1-4-99	24·50			
Bogra to Mohimaganj	5-4-00	22·02			
Mohimaganj to Bonarpara	1-8-00	4·60			
Bonarpara to Kaunia	1-7-05	44·47			
			95·59		
Dacca section—					
Narayanganj to Dacca	4-1-85	10·12			
Dacca to Jaydebpur	1-8-85	20·10			
Jaydebpur to Gafargaon	1-8-85	32·50			
Gafargaon to Mymensingh.	1-8-85	23·52			
			86·24		
Jainti Branch, British Section†—					
South bank of Kaljani river to Alipur Duar	18-1-00	0·64			†This line was originally on the 2′ 6″ gauge, but was converted to, and opened on, the 3′ 3¾″ gauge up to Raja Bhat Khawa from 13th April 1910 and up to Jainti from 1st May 1910.
Alipur Duar to Raja Bhat Khawa	5-4-00	9·97			
Raja Bhat Khawa to Jainti	1-2-01	9·18			
			19·79		
Branches and extensions on the Main line—					
Kosi branch—					
Katihar to Kasba	1-4-87	21·75			
Kasba to Forbesganj	1-7-89	36·84			
Forbesganj to Jogbani	15-2-09	8·60			
			67·19		
Godagari extension—					
Katihar to Godagari	1-1-09	105·32			
			105·32		
Kissengunge branch—					
Barsoi to Kissengunge	15-12-92	35·11			
			35·11		
Dhubri branch—					
Golakganj to Dhubri	23-9-02	13·73			
			13·73		
Total carried over	...	...	...	896·17	

EASTERN BENGAL RAILWAY SYSTEM—*contd.*

Eastern Bengal railway (3′ 3⅜″ gauge)—*concld.*

Progress in opening—*concld.*

Sections of railway.	Date of opening.	Miles.	Total.	Grand total.	Remarks.
1	2	3	4	5	6
Brought forward . .	...	...	...	896·17	
Tangla extension—					
Rangiya to Tangla	1-3-12	24·32	24·32		
Branch on the Santahar-Kaunia loop—					
Singhjani branch—					
Bonarpara to Fulchhari (on the right bank of the Brahmaputra).	1-9-00 18-8-12	8·25 1·00			
Bahadurabad (on the left bank of the Brahmaputra) to Singhjani.	18-8-12	24·92			
Kandirpara Ghat line	6-11-14	5·54	39·71		
Branch on the Jainti Branch—					
Dalsingpara branch—					
Raja Bhat Khawa to Kalchini	1-4-12	7·34			
Kalchini to Hasmara	1-4-13	6·66			
Hasmara to Dalsingpara	5-1-14	3·52	17·52	81·55	
GRAND TOTAL OPEN MILEAGE . .	...	...	...	977·72	
DOUBLE LINE—					
Teesta Junction to Lalmonirhat	1-9-14	7·29	7·29		

Details of construction—

Permanent-way.—The permanent-way consists of 50-lb. flat-footed steel rails, O.S., N.S. and B.S., and wooden sleepers, with the following exceptions:—

Forty-one miles of the Santahar-Kaunia loop, between Nasaratpur and Bonarpara and the up and down lines between Teesta and Lalmonirhat are laid with 60-lb. flat-footed steel rails, B.S. The lines from Manihari to Katihar, Golakganj to Dhubri, and Buxa Road to Jainti and the Kandirpara Ghat line, are laid with 41¼-lb. flat-footed steel rails. Nine miles of Dacca section are laid with 64-lb. double-headed and the remainder, with 62-lb. flat-footed second-hand steel rails. On the Tangla extension, the Dalsingpara branch and in certain station yards of the Dacca section the rails are second-hand 41¼-lb. flat-footed.

Ballast.—The whole of the line, except the portions from Golakganj Junction to Dhubri, Forbesganj to Jogbani, Rangiya to Tangla, Raja Bhat Khawa to Dalsingpara and Singhjani to Bahadurabad and Kandirpara Ghat line, is ballasted or shortly to be ballasted. The ballast is brick, stone or shingle.

Fencing.—The whole of the 3′ 3⅜″ gauge line is fenced, except the sections Santahar to Kaunia, Bonarpara to Fulchhari, Barsoi to Kissengunge, Forbesganj to Jogbani, Golakganj to Dhubri, the Santrabari extension, Rangiya to Tangla, Raja Bhat Khawa to Dalsingpara and Dacca to Mymensingh, the Gauhati extension and the Singhjani-Fulchhari extension. On the unfenced sections the station yards are usually fenced.

Curves.—The sharpest curve is of 575 feet radius.

Gradients.—The ruling gradient on the 3′ 3⅜″ gauge section is 1 in 200 which occurs at the approaches of large bridges and fairly frequently and for long lengths on the Gauhati extension where there are also short lengths of 1 in 100 and 1 in 128 between Pandu station and Gauhati. On the Santrabari extension and on the section from Raja Bhat Khawa to Kalchini the ruling gradients on the last few miles near the hills are 1 in 100, and 1 in 150, respectively, but there is a small length of 1 in 50 between Buxa Road and Jainti.

Contracts—

Nil.—The line is owned and worked by the State.

Statistics of working.—

Included with the Eastern Bengal Railway (5′ 6″ gauge).

Eastern Bengal railway (2′ 6″ gauge)—

The Ranaghat-Krishnagar branch has been amalgamated with the Eastern Bengal railway system from 1st July 1904. The Teesta-Kurigram branch was originally a portion of the 2′ 6″ gauge lines from Teesta Junction to Mogalhat and Jatrapur, known as the Kaunia-Dharlla branch. The line from Teesta Junction to Mogalhat has been converted to the 3′ 3⅜″ gauge and now forms part of the "Kaunia-Dhubri section." The line from Kurigram to Jatrapur has been abandoned.

EASTERN BENGAL RAILWAY SYSTEM—*contd.*

Eastern Bengal railway (2′ 6″ gauge)—*concld.*

Progress in opening—

Sections of railway.	Date of opening.	Miles.	Total.
1	2	3	4
Ranaghat-Krishnagar branch—			
Aistala Ghat (right bank of the Churni river) near Ranaghat to Krishnagar .	5-4-99	20·25	
Teesta-Kurigram branch—			
Teesta Junction to Kurigram	18-7-81	14·85	
TOTAL . .	...	...	35·10

Details of construction—

Permanent-way.—On the Ranaghat-Krishnagar and Teesta-Kurigram branches the rails are flat-footed steel, 25 lbs. per yard; the sleepers are pynkado and sâl.

Ballast.—The Ranaghat-Krishnagar branch is brick ballasted and the Teesta-Kurigram branch is not ballasted.

Fencing.—No lines on the 2′ 6″ gauge are fenced.

Curves.—The sharpest curve is of 500 feet radius.

Gradients.—The ruling gradient on the Teesta-Kurigram and Ranaghat-Krishnagar branches is 1 in 200, except on a short length on the Teesta-Kurigram line where it is 1 in 100.

Contracts—

Nil.—The line is owned and worked by the State.

Statistics of working.—

Included with the Eastern Bengal Railway (5′ 6″ gauge).

Cooch Behar State railway (3′ 3⅜″ gauge)—

Progress in opening—

Sections of railway.	Date of opening.	Miles.	Total.	Remarks.
1	2	3	4	5
Gitaldaha to Manshahi River	15-9-93	18·31		This line was originally on the 2′ 6″ gauge, but was converted to, and opened on, the 3′ 3⅜″ gauge up to Cooch Behar from 14th February 1910 and up to the end of the Cooch Behar State section from 13th April 1910.
Manshahi River to the town of Cooch Behar . .	15-12-98	3·22		
Torsa Bridge	16-5-00	0·11		
Cooch Behar to temporary Alipur Duar (Kholta)	15-4-99	10·96		
Temporary Alipur Duar (Kholta) to the South Bank of the Kaljani river.	18-1-00	0·49		
TOTAL . .	...	...	33·09	

Details of construction—

Permanent-way.—The permanent-way consists of flat-footed steel rails, 41¼ lbs. per yard, laid on sâl sleepers.

Ballast.—The line is ballasted with shingle.

Fencing.—The line is unfenced.

Curves.—The sharpest curve is of 1,300 feet radius.

Gradients.—The ruling gradient is 1 in 100.

Agreement—

Dated the 25th February 1907, having effect from the 1st January 1907, *between the Secretary of State and His Highness the Maharaja of Cooch Behar,* as to the management, maintenance and working of the Cooch Behar State railway by the Eastern Bengal railway.

Main provisions of agreement—

(i) *Land.*—
(ii) *Government aid.*— } The railway is the property of the Cooch Behar Durbar, which provides all funds not contemplated in clause 2 of the agreement required for the completion and equipment of the line from time to time, and is managed, maintained and worked by the agency of the Eastern Bengal railway.

(iii) *Terms of working.*—
(iv) *Distribution of profits.*— } For management, maintenance and working, the Eastern Bengal railway retains 40 per cent of the gross earnings: provided that when the stock of the Eastern Bengal railway is used for the conveyance of any traffic on the Cooch Behar State railway, the Eastern Bengal railway retains up to, but not exceeding, 45 per cent of the gross earnings obtained from the use of such stock. The remainder, being the net earnings of the Branch, is paid over to the Durbar.

(v) *Rates and fares.*—The Administration of the Eastern Bengal railway has full control over the rates and fares on the Cooch Behar State railway, subject to the maxima and minima prescribed by the Government of India in schedule A appended to the agreement (certain station to station rates applicable after the opening of the Dharlla bridge are prescribed in schedule B to the agreement).

EASTERN BENGAL RAILWAY SYSTEM—*contd.*

Cooch Behar State railway (3′ 3⅜″ gauge)—*concld.*

Main provisions of agreement—*concld.*

(vi) *Special obligations as to the conveyance of* —

(*a*) Mails, troops, police, high Government officials and Government stores.—Mails are conveyed in accordance with rules in force on State railways. There is no special provision in the agreement for the carriage of troops, high Government officials and Government stores.

(*b*) Government bullion and coin, and the persons in charge thereof.—Not specified.

(vii) *Power of the Government to determine agreement.*—
(viii) *Power of the Cooch Behar Durbar to determine agreement.*— } Terminable on the expiry of six months' notice from either side.

(ix) *Term of agreement.*—Until determined under (vii) and (viii).

Statistics of working (Those for the periods prior to 1908 will be found in Appendix 38 to the Railway Administration Report for 1907.)—

Year.	Mileage open at end of each year.	Total capital outlay, including suspense, to end of each year, *i.e.*, outlay on (i) lines open and (ii) lines partly or wholly under construction.	Gross earnings.	Net earnings.	Percentage of net earnings on total capital outlay given in column (3).	Earnings per mile per week.	Proportion of expenses to earnings.	Remarks.
1	2	3	4	5	6	7	8	9
	Miles.	Rs.	Rs.	Rs.		Rs.		
1908 . .	33·60	15,17,033	1,96,254	1,14,833	7·57	112	41·48	* The decrease in 1909 was chiefly due to the cost of repairs to damages caused by floods in 1906, which were originally debited to Revenue in 1906 and 1907, having been written back to capital in 1909. † The increase is due chiefly to the debit to Revenue of the cost of repairs to flood damages.
1909 . .	33·60	17,71,553	1,91,077	1,39,144	7·85	109	*27·17	
1910 . .	33·27	20,45,637	2,03,510	1,06,039	5·28	118	†46·91	
1911 . .	33·09	19,08,477	2,61,711	1,18,360	6·20	152	45·23	
1912 . .	33·09	19,30,869	2,71,097	1,46,019	7·56	157	46·13	
1st qr. of 1913.	33·09	19,49,585	77,277	41,562	8·52	180	46·34	
1913-14 .	33·09	20,22,791	3,00,374	1,63,808	8·05	175	45·46	
1914-15 .	33·09	20,50,061	2,69,264	1,41,749	6·91	156	47·36	
1915-16 .	33·09	19,59,396	2,63 494	1,40,785	7·18	153	46·57	
1916-17 .	33·09	19,61,895	2,86.152	155,257	7·91	866	45·74	
1917-18 .	33·09	19,76,641	2,69,878	1,39,817	7·07	157	48·19	

Mymensingh-Jamalpur-Jagannathganj railway (3′ 3⅜″ gauge)—

Date of registration of the Company.—9th June 1899.

This line, which terminates on the Brahmaputra river, is connected with the Eastern section of the Eastern Bengal railway at Goalundo by the India General Navigation and Railway and River Steam Navigation Companies' steamer services. The new Singhjani-Fulchhari extension, starting at Singhjani, a station on this line, links it with the Northern section of the Eastern Bengal railway at Fulchhari.

Progress in opening—

Sections of railway.	Date of opening.	Miles.	Total.
1	2	3	4
Mymensingh to Singhjani	15-10-98	33·32	
Singhjani to Jagannathganj	22-10-99	22·73	
Total	...	...	56·05

Details of construction—

Permanent-way.—The permanent-way consists of 50-lb. flat-footed steel rails, O.S., laid on sál sleepers.

Ballast.—The line is ballasted throughout with brick.

Fencing.—The line is fenced only at stations and through the town of Mymensingh.

Curves.—The sharpest curve is of 2,685 feet radius.

Gradients.—The ruling gradient is 1 in 300.

Agreements and contract—

Agreement, dated the 6th January 1897 (called the preliminary agreement)
Contract, dated the 6th January 1897 (called the scheduled contract)
} *between the Secretary of State and the India General Steam Navigation Company* (called the Old Company), as to the construction, management, maintenance and working of the Mymensingh-Jamalpur-Jaganuathganj branch railway.

EASTERN BENGAL RAILWAY SYSTEM—*concld.*

Mymensingh Jamalpur-Jagannathganj railway (3′ 3⅜″ gauge)—*concld.*

Agreements and contract—*concld.*

Agreement, dated the 3rd October 1899, (supplemental to the preliminary agreement and scheduled contract of 1897), *between the India General Steam Navigation Company* (called the Old Company) and Messrs. W. H. Cheetham, C. C. Kilburn, and A. Pointon, merchants, the liquidators thereof, *the India General Navigation and Railway Company* (called the New Company), *and the Secretary of State*, as to the substitution, as from the 1st July 1899, of the New Company for the Old Company as a party to the preliminary agreement and the scheduled contract, respectively, and for the transfer of the domicile of the Mymensingh-Jamalpur-Jagannathganj branch railway Head Office from Calcutta to London.

Main provisions of agreements and contract—

(i) *Land.*—Provided by the Government free of cost to the Company.

(ii) *Government aid.*—For the more convenient and economical construction of the railway its execution was undertaken by the Government, who also stock manage, maintain and work it through the agency of the Eastern Bengal railway. The Government agree to allow to the Company, in respect of each calendar year, by way of rebate, such a sum not exceeding in any year the netearnings from traffic interchanged between the Eastern Bengal railway system and the Company's railway only, as shall together with the Company's net earnings for the year, make up 3½ per cent. per annum, on the actual capital expenditure on the branch. (Mymensingh is to be considered a station on the Eastern Bengal railway system, and cross traffic passing over the Company's line when booked through between stations on the Dacca-Mymensingh section and other stations on the Eastern Bengal railway is not to be taken into account in calculating rebate).

(iii) *Terms of working.*— } For management, maintenance, working and the use of rolling-stock
(iv) *Distribution of profits.*— } the Eastern Bengal railway retains 45 per cent. of the gross earnings of the branch; the remainder, being the net earnings, is paid over to the Company.

(v) *Rates and fares.*—To be arranged between the Government and the working agency, subject to the condition that they are to be within the maxima and minima, and that the classification of goods is to be in conformity with that in force on the Eastern Bengal railway.

(vi) *Special obligations as to the conveyance of.*—
(*a*) Mails, troops, police, high Government officials and Government stores.— } Not specified.
(*b*) Government bullion and coin, and the persons in charge thereof.— }

(vii) *Power of the Government to determine contract.*—Government may determine the contract on 12 months' notice either on—
(*a*) the 31st December 1919, or at the end of any subsequent period of 10 years, in which case the Government undertake to pay to the Company in rupees a sum equal to 25 times the amount of the average yearly net earnings, not including rebate payments, derived by the Company from the branch railway during the three years immediately preceding the time at which the contract is determined, provided that such sum shall not exceed by more than 20 per cent. the total capital expenditure of the Company, nor be less than such total capital expenditure; or
(*b*) on the 31st December 1948, in which case the Government undertake to pay to the Company a sum equal to the total capital expenditure in rupees.

(viii) *Power of the Company to surrender contract.*—Nil.

(ix) *Term of contract.*—Until determined under (vii).

Statistics of working—

Year.	Mileage open at end of each year.	Total capital outlay, including suspense, to end of each year, i.e., outlay on (i) lines open and (ii) lines partly or wholly under construction.	Gross earnings.	Net earnings.	Percentage of net earnings on total capital outlay given in column (3).	Rebate from the Eastern Bengal railway.	Total income.	Percentage of total income on total capital outlay given in column (3).	Earnings per mile per week.	Proportion of expenses to earnings.	Remarks.
1	2	3	4	5	6	7	8	9	10	11	12
	Miles.	Rs.	Rs.	Rs.		Rs.	Rs.		Rs.		
1898 .	33·07	10,44,638	7,660	4,213	0·40	...	4,213	0·40	27	45·00	*The increase is due to the expenditure incurred on terminals at Jagannathganj. †The increase is due to the expenditure incurred on diverting about 4 miles of main line near Bidyaganj. ‡The decrease is due to the write-back of expenditure referred to in the remark marked †.
1899 .	53·37	16,11,248	66,499	36,575	2·27	...	36,575	2·27	35	45·00	
1900 .	53·37	18,78,395	1,62,028	89,116	4·74	...	89,116	4·74	58	45·00	
1901 .	53·37	20,84,346	1,67,756	92,265	4·43	...	92,265	4·43	60	45·00	
1902 .	53·14	22,85,677	2,05,251	1,12,888	4·94	...	1,12,888	4·94	74	45·00	
1903 .	52·70	23,28,917	2,22,825	1,19,573	5·13	...	1,19,573	5·13	82	*46·34	
1904 .	51·37	23,51,113	2,21,168	1,18,336	5·03	...	1,18,336	5·03	81	*46·49	
1905 .	50·69	23,86,029	2,16,642	1,18,748	4·98	...	1,18,748	4·98	81	*45·19	
1906 .	53·22	24,15,248	2,72,929	1,50,030	6·21	...	1,50,030	6·21	103	*45·03	
1907 .	53·90	24,34,018	3,31,673	1,82,402	7·50	...	1,82,402	7·50	122	45·00	
1908 .	53·91	24,50,870	3,94,866	2,17,176	8·86	...	2,17,176	8·86	141	45·00	
1909 .	54·55	24,84,174	3,80,917	2,09,504	8·43	...	2,09,504	8·43	134	45·00	
1910 .	55·51	25,31,451	3,78,228	2,08,025	8·22	...	2,08,025	8·22	133	45·00	
1911 .	55·22	25,72,135	3,96,262	2,17,944	8·47	...	2,17,944	8·47	137	45·00	
1912 .	55·22	26,27,077	3,96,790	2,18,235	8·31	...	2,18,235	8·31	138	45·00	
1st qr. of 1913.	55·22	26,46,049	99,227	54,575	2·06	...	54,575	2·06	138	45·00	
1913-14.	55·22	26,39,250	5,11,305	2,57,198	9·74	...	2,57,198	9·74	178	†49·70	
1914-15.	55·22	26,53,778	5,12,412	3,05,846	11·50	...	3,05,846	11·50	178	‡40·31	
1915-16.	53·66	26,67,078	5,50,434	3,02,739	11·35	...	3,02,739	11·35	197	45·00	
1916-17	56·23	26,75,964	6,30,618	3,46,840	12·96	...	3,46,840	12·96	216	45·00	
1917-18	56·05	26,79,585	6,39,160	3,51,538	13·12	...	3,51,538	13·12	219	45·00	

EASTERN BENGAL RAILWAY SYSTEM—*concld.*

Khulna-Bagirhaut railway (2′ 6″ gauge)—

Date of registration of the Company—1916.

The construction of this line by the Eastern Bengal railway on behalf of a Branch Line Company was sanctioned in Railway Board's Notification No. 448-P., dated the 9th March 1916.

Progress in opening—

Section of railway.	Date of opening.	Miles.	Total.
1	2	3	4
Khulna to Bagirhaut (sanctioned on 9th March 1916) . . .	...	19·66	19·66

EAST INDIAN RAILWAY SYSTEM.

Chairman.—Lieut.-Col. Richard Gardiner.

Secretary.—Charles W. Young, Esq.

Offices.—28-30, Nicholas Lane, London, E. C.

Date of registration of the old guaranteed company.—1849.

Lines comprised in the system.—The East Indian railway system is made up of—

	Open line.	Under construction or sanctioned for construction.	Total.
	Miles.	Miles.	Miles.
(*a*) East Indian railway (5′ 6″ gauge)	2,463·77	7·93	2,471·70
(*b*) Delhi-Umballa-Kalka railway (5′ 6″ gauge)	206·40	...	206·40
(*c*) Jind-Panipat railway (Native State Section) (5′ 6″)	25·90	...	25·90
(*d*) South Bihar railway (5′ 6″ gauge)	79·19	...	79·19
Total	2,775·26	7·93	2,783·19

Running powers—

	Miles.
Home line over Foreign lines :—	
Agra Fort to Jumna Bridge, Bombay, Baroda and Central India (3′ 3⅜″ gauge) railway, for passenger trains only	1·00
Naihati to Majherhat, Eastern Bengal railway, for goods trains only	36·88
Moghal Sarai to Benares Cantonment, Oudh and Rohilkhand railway, for certain passenger trains only	10·00
Agra City to Agra Cantonment, Great Indian Peninsula railway, for goods and passenger trains	3·37
Jind City to Jind Junction, Southern Punjab railway, for passenger and goods trains	2·95
Total	54·20
Foreign lines over Home line :—	
Bengal-Nagpur railway at Katni	0·30
,, ,, ,, at Katrasgarh for passenger and goods trains	0·66
,, ,, ,, at Asansol	0·50
,, ,, ,, at Howrah, for passenger trains only	1·00
Great Indian Peninsula railway at Cawnpore, 0·97 mile for passenger trains and 0·52 mile for goods trains	1·49
,, ,, ,, at Katni, 0·38 mile, and between Belanganj and Jumna Bridge goods depot, 1·86 miles, for goods trains only.	2·24
,, ,, ,, at Manikpur for passenger and goods trains	0·63
North Western and Oudh and Rohilkhand railways, Ghaziabad to Delhi for passenger and goods trains	13·00
Total	19·82

East Indian railway (5′ 6″ gauge)—

The lines owned by the late East Indian Guaranteed Railway Company were purchased by the State in 1879, and all the contracts then subsisting between the Secretary of State and the company (except those relating to debentures or debenture stock) were determined. The purchase price was £32,750,000, and it was provided that this should be paid in the form of a terminable annuity of the amount of £1,473,750, payable from the 1st January 1880 to the 14th February 1953. One-fifth of the annuity was deferred, and the holders of this portion (representing a capital sum of £6,550,000) constitute the present East Indian Railway Company. Since the purchase certain State and Companies' branch lines were incorporated in the undertaking

Progress in opening—

Sections of railway.	Date of opening.	Miles.	Total.	Grand total.
1	2	3	4	5
Main line—				
Howrah to Hooghly	15-8-54	23·28		
Hooghly to Pundooah	1-9-54	14·31		
Pundooah to Khana Junction	3-2-55	36·85		
Khana Junction to Raneegunge	3-2-55	45·71		
Raneegunge to Siarsol (near Asansol)	21-7-63	1·70		
Siarsol (near Asansol) to Sitarampur	1-1-65	15·15		
Sitarampur to Luckeeserai Junction	1-1-71	124·59		
Luckeeserai to Dinapore	17-11-62	82·42		
Dinapore to Moghal Sarai	22-12-62	125·57		
Moghal Sarai to Mirzapur	1-1-64	39·28		
Mirzapur to South Bank, Jumna	4-4-64	52·95		
Jumna Bridge to Allahabad	15-8-65	2·70		
Allahabad to Cawnpore	3-3-59	119·47		
Cawnpore to Etawah	1-7-61	86·46		
Etawah to Shikohabad	13-11-61	34·39		
Shikohabad to Tundla Junction	1-4-62	22·92		
Tundla Junction to Aligarh	1-3-63	48·56		
Aligarh to Chola (Bulandshahr Road)	1-4-64	35·54		
Chola to Delhi (South Bank, Jumna)	1-8-64	41·29		
Delhi Terminus	1-1-67	1·78		
			954·92	
Loop line—				
Khana Junction to River Adjai	3-10-58	19·00		
River Adjai to Sainthia	3-9-59	25·12		
Sainthia to Tinpahar	15-10-60	76·12		
Tinpahar to Bhagalpur	1-11-61	69·15		
Bhagalpur to Jamalpur	10-2-62	33·03		
Jamalpur to Kiul	17-11-62	28·00		
			250·42	
Carried over	...	...	...	205·34

EAST INDIAN RAILWAY SYSTEM—*contd.*

East Indian railway (5′ 6″ gauge)—*contd.*

Progress in opening—*contd.*

Sections of railway.	Date of opening.	Miles.	Total.	Grand total.	Remarks.
1	2	3	4	5	6
Brought forward	...	...	M.	1,205·34	
Grand Chord—					
Sitarampur to Barakar	1-1-65	5·43			
Barakar to Dhanbaid	20-5-94	25·75			
Dhanbaid to Paharpur	6-12-06	103·69			
Paharpur to Manpur	15-8-06	17·42			
Gya to Moghal Sarai	1-3-09	126·11			
			278·40		
Howrah-Burdwan Chord—					
A point 6 miles from Howrah to Saktighar	1-1-17	45·26			
			45·26		
Branches on the Main line—					
*Tarkessur branch**—					*This line was constructed by the Tarkessur Railway Company and worked by the East Indian Railway Company, under an agreement, up to the 31st December 1914. It was acquired by the State and incorporated with the East Indian railway on the 1st January 1915.
Sheoraphuli to Tarkessur	1-1-85	22·21			
			22·21		
Bhadreswar branch—					
Bhadreswar Junction to the river bank.	6-12-82	2·60			
			2·60		
Naihati branch—					
Bandel Junction to Naihati	15-3-87	4·47			
			4·47		
Bandel Barharwa branch—					
Bandel Junction to Nabadwip	1-4-12	40·50			
Nabadwip to Katwa	15-5-12	24·31			
Katwa to Jangipur Road	1-5-13	65·91			
Jangipur Road to Dhulian Ganges	31-1-13	17·24			
Dhulian Ganges to Barharwa	19-1-11	18·32			
			166·28		
Ondal-Sainthia Chord—					
Ondal to Sainthia	10-12-06	43·91			
			43·91		
Ondal loop—					
Ondal to Baboisole	1-5-64	2·03			
Baboisole to Mangalpur	1-1-63	2·74			
Mangalpur to Toposi	2-2-63	2·65			
Toposi to Ikrah Junction	15-4-94	2·42			
Ikrah Junction to Gaurangdi	1-6-95	14·16			
Gaurangdi to Rupnarainpur	30-3-95	7·54			
			31·54		
Toposi-Barabani Chord—					
Toposi to mile 3·79	15-6-08	3·79			
Mile 3·79 to mile 6·50 towards Barabani	19-4-15	2·71			
			6·50		†This line was constructed on the 3′ 3½″ gauge and worked by Messrs. Burn and Co. of Calcutta up to the 30th June 1911. It was acquired by the State and incorporated with the East Indian railway on the 1st July 1911 and converted to the 5′ 6″ gauge on the 13th September 1913.
Ikrah branch—					
Ikrah Junction to Barabani	15-4-94	8·40			
Barabani to Sitarampur	15-4-02	6·98			
			15·38		
Salanpur branch—					
Salanpur to Shamdi	7-9-94	4·29			
	1-1-97	1·24			
			5·53		
Giridih branch—					
Madhupur Junction to Giridih	1-1-71	26·70			
			26·70		
Deoghur branch†—					
Jasidih Junction to Baidyanathdham	23-12-82	4·12			
			4·12		
Mokameh Ghat branch—					
Tal Junction, *viâ* Mokameh Ghat, to Mokameh Junction.	1-5-83	2·98			‡This line was constructed by the State and worked by that agency up to 1882. It was made over to the East Indian Railway Company to be worked, under an agreement, on the 1st January 1883 and incorporated with the East Indian railway on the 1st July 1892.
			2·98		
Patna Ghat branch—					
Patna to Patna Ghat	17-11-62	0·87			
			0·87		
Patna-Gya branch‡—					
Bankipore Junction to Bankipore	2-6-79	0·25			
Bankipore to Jehanabad	21-4-79	28·95			
Jehanabad to Gya	2-6-79	28·48			
			57·68		
Digha Ghat branch—					
Bankipore Junction to Digha Ghat	2-4-85	5·53			
			5·53		
Tari Ghat branch§—					§This line is the old Dildarnagar-Ghazipur State railway which was incorporated with the East Indian railway on the 1st January 1889.
Dildarnagar Junction to Tari Ghat	5-10-80	12·00			
			12·00		
Benares chord—					
Dihwa Block hut to Bechupur (Oudh and Rohilkhand railway).	14-5-10	1·18			
			1·18		
Jubbulpore branch—					
Naini Junction to Jubbulpore	1-8-67	224·49			
			224·49	957·63	
Carried over	...	...	...	2,162·97	

EAST INDIAN RAILWAY SYSTEM—*contd.*

East Indian railway (5′ 6″ gauge)—*contd.*

Progress in opening—*contd.*

Sections of railway.	Date of opening.	Miles.	Total.	Grand total.	Remarks.
1	2	3	4	5	6
Brought forward	...	...	...	2,162·97	
Allahabad Fort branch	3-3-59	2·33	2·33		
Cawnpore city branch	15-2-79	0·88	0·88		
Shikohabad-Farukhabad branch—					
Shikohabad to Mainpuri	1-3-05	29·71			
Mainpuri to Bhongaon	17-8-05	8·63			
Bhongaon to Farukhabad	1-1-06	27·61	65·95		
Agra branch—					
Tundla Junction to Jumna bridge.	1-4-62	13·35			
Jumna bridge to Agra city (Agra direct access.)	15-10-07	1·64	14·99		
Hathras branch—					
Hathras Junction to Hathras Kilah	1-11-98	5·58	5·58		
Hapur branch—					
Khurja to Bulandshahr	7-2-07	14·00			
Bulandshahr to Hapur	15-4-07	24·81	38·81		
Branches on the loop line—					
*Azimganj branch—**					
Nalhati to Azimganj	21-12-63	27·23	27·23		
Rajmehal branch—					
Tinpahar Junction to Rajmehal	15-10-60	7·00	7·00		
Sakrigali branch—					
Sakrigali Junction to the river Ganges	1-1-94	1·26	1·26		
Mirza Chowki branch—					
Mirza Chowki to the river side	1-3-09	0·20	0·20		
Sultangunge Ghat branch—					
Sultangunge Junction to Sultangunge Ghat	6-5-95	1·16	1·16		
Monghyr branch—					
Jamalpur Junction to Monghyr	10-4-62	5·68	5·68		
Branches on the Grand Chord—					
Chanch branch—					
Chanch block hut to mile 197·30	1-2-93 5-8-96	2·88 1·00	3·88		
Pandra branch—					
Pandra block hut to mile 151·41	26-11-00	2·66	2·66		
Pradhankhunta-Pathardihi Chord—					
Pradhankhunta to Pathardihi	1-1-13	9·59	9·59		
Katras branch—					
Dhanbaid to Katrasgarh	20-5-94	9·11	9·11		
Damuda branch—					
Kasunda to Jharia	30-6-95	4·60			
Jharia to Pathardihi	30-6-95 15-7-96	3·40 1·77	9·77		
Jharia branch—					
Dhanbaid to Jharia	1-5-03	3·75	3·75		
Kasunda Tetulmari link—					
Kasunda to Tetulmari (including portion of Chandur branch).	20-4-07 6-12-06	3·15	3·15		
Katras-Khanoodih extension—					
Katrasgarh to Khanoodih	7-3-03	7·17	7·17		
Jamuniatand link—					
Kanoodih extension mile 182·58 to mile 184·55 on the Bokharo Colliery joint line.	11-10-16	1·97	1·97		
Katras-Mulkera cross connection—					
Northern half of connection	15-8-03	0·66	0·66		
Barun-Daltonganj branch—					
Sone East Bank (Barun) to Rajhara	3-5-02	67·30			
Rajhara to Daltonganj	15-12-02	10·72	78·02		
				300·89	
TOTAL OPEN MILEAGE CARRIED OVER	...	...	...	2,463·77	

*This line was constructed by the Indian Branch (afterwards Oudh and Rohilkhand) Railway Company as a 4′ gauge line. It was purchased by the State on the 31st March 1872, incorporated with the East Indian railway on the 1st April 1892 and opened on the 5′ 6″ gauge on the 15th July 1892.

EAST INDIAN RAILWAY SYSTEM—*contd.*

East Indian railway (5′ 6″ gauge)—*contd.*

Progress in opening—*contd.*

Sections of railway.	Date of opening.	Miles.	Total.	Grand total.	Remarks.
1	2	3	4	5	6
Brought forward.	...	...	...	2,463·77	
UNDER CONSTRUCTION OR SANCTIONED FOR CONSTRUCTION—					
Toposi-Baraboni chord—					
6·50 miles from Toposi to Baraboni (sanctioned on 28th May 1913).	...	3·70			
Allahabad Fort branch—					
Extension to Daraganj (sanctioned on 23rd November 1914).	...	1·85			
Dhanbad to Katrasgarh and beyond (sanctioned on 25th March 1918).	...	2·38			
			7·93		
				7·93	
GRAND TOTAL	...	...	...	2,471·70	
SEXTUPLE LINE—					
Howrah station to Bengal-Nagpur railway Junction cabin	1-1-08	0·85	0·85		
				0·85	
QUINTUPLE LINE—					
Lillooah to Bally	1-1-17	2·24	2·24		
				2·24	
QUADRUPLE LINE—					
Bengal-Nagpur Railway Junction cabin to Lillooah	1-1-07	2·08			
Serampore to Sheoraphuli	26-6-13	1·50			
Saktighar to Burdwan	1-1-17	7·91			
			11·49		
				11·49	
TRIPLE LINE—					
Bally to Uttarpara	1-10-15	0·83			
Uttarpara to Serampore	3-6-12	6·05			
Sheoraphuli to Baidyabati	18-9-13	0·87			
Baidyabati to Bhadreswar	17-4-16	2·71			
Debipur to Boinchee	1-1-03	2·62			
Raneegunge to Asansol	22-7-07	11·15			
			24·23		
				24·23	
DOUBLE LINE—					
On the main line—					
Bally to Uttarpara	10-3-57	*0·55			*Excluding the triple length.
Sheoraphuli to Chandernagore	1-2-58	*2·56			
Chandernagore to Hooghly	1-5-58	3·04			
Hooghly to Magra	1-10-58	5·49			
Magra to Pundooah	25-2-59	8·82			
Pundooah to Saktighar	1-10-59	*18·16			
Burdwan to Khana	1-1-59	8·16			
Khana to Durgapur	1-6-70	31·35			
Durgapur to Raneegunge	2-9-70	14·36			
Raneegunge to Sitarampur	19-12-70	*5·45			
Sitarampur to Luckeeserai	1-1-71	124·59			
Luckeeserai to Burhee	22-6-60	9·82			
Burhee to Barh	22-2-68	27·10			
Barh to Futwah	11-1-68	25·87			
Futwah to Dinapore	20-3-67	19·63			
Dinapore to Bihta	13-8-68	10·84			
Bihta to Arrah	28-3-70	13·64			
Arrah to Buxar	13-8-68	42·63			
Buxar to Dildarnagar	15-4-82	22·47			
Dildarnagar to Zamania	20-5-82	8·42			
Zamania to Sakaldiha	20-9-82	16·17			
Sakaldiha to Moghal Sarai	10-8-82	11·40			
Moghal Sarai to Ahraura Road	10-8-07	7·92			
Ahraura Road to Kylahat	8-12-06	4·95			
Kylahat to Chunar	29-12-08	5·22			
Chunar to Dagmagpur	19-2-09	4·91			
Dagmagpur to Pahara	27-2-09	4·91			
Pahara to Jhingura	16-1-08	4·61			
Jhingura to Mirzapur	6-8-07	6·76			
Mirzapur to Bindhachal	6-7-11	4·56			
Bindhachal to Birohe	12-7-11	2·91			
Birohe to Gaipura	26-9-11	4·64			
Gaipura to Jigna	10-10-11	4·34			
Jigna to Mandah Road	16-11-11	5·24			
Mandah Road to Unchdih	30-11-11	5·07			
Unchdih to Meja Road	23-11-11	5·19			
Meja Road to Tonse bridge	26-10-11	3·24			
Tonse bridge to Bheerpur	10-4-11	3·58			
Bheerpur to Karchana	9-4-11	5·74			
Karchana to Chheoki	6-8-09	5·70			
Carried over	...	...	520·01		

EAST INDIAN RAILWAY SYSTEM—*contd.*

East Indian railway (5′ 6″ gauge)—*contd.*

Progress in opening—*concld.*

Sections of railway.	Date of opening.	Miles.	Total.	Grand total.	Remarks.
1	2	3	4	5	6
Brought forward	...	...	520·01		
DOUBLE LINE—*concld.*					
Chheoki to Naini	31-1-07	1·08			
Naini to Allahabad	15-1-06 4-10-13	3·76 0·60			
Allahabad to Subadargunge	27-1-09	3·50			
Ghaziabad to Shahdara	20-2-02	8·13			
Shahdara to east side of Jumna bridge near Delhi	1-7-02	2·57			
East side of Jumna bridge to Delhi	6-3-13	3·24			
			22·88		
On the branches of the main line—					
Nalhati branch	15-3-87 1-7-04	4·47			
			4·47		
On the Grand Chord—					
Sitarampur to Barakar	6-3-01	5·43			
Chanch to Mugma	29-9-05	3·78			
Mugma to Futka	29-1-06	3·16			
Futka to Kaloobathan	17-1-06	2·59			
Kaloobathan to Chhota Ambona	21-3-06	5·79			
Chhota Ambona to Pradhankhunta	17-10-05	3·68			
Pradhankhunta to Dhanbad	20-8-06 1-7-06	5·01			
Gujhandi to Gurpa	11-3-07	13·62			
Gya to Kastha	30-4-14	4·93			
Ganj Khwaja to Moghal Sarai	4-5-14	3·14			
			51·13		
On the branches of the Grand Chord—					
Portion of Jharia branch	1-1-04 26-9-12	0·17 1·45			
Lodna to Pathardihi	1-1-13	0·45			
			2·07		
On the Howrah-Burdwan chord—					
A point 6 miles from Howrah to Saktighar	1-1-17	45·26	45·26		
GRAND TOTAL, DOUBLE LINE	...	...	...	645·82	

Details of construction—

Permanent-way.—The main line from Howrah to Delhi, including Howrah-Burdwan chord, the Grand Chord, the Loop line from Khana Junction to Kiul, the Jubbulpore branch, Tarkessur branch, Jharia branch, Ondal loop, Ikrah branch, Giridih branch, Patna-Gya branch, Barun-Daltonganj branch, Agra branch, Shikohabad-Farukhabad and Bandel-Barharwa branches are laid with steel rails throughout. A few short branches are still laid with iron rails, but these are being replaced with second-hand steel rails removed from the main line in the course of relaying operations.

On both the up and down roads of the main line from Howrah to Allahabad, a distance of about 564 miles, the rails are 85-lb. bull-headed with the exception of a few lengths aggregating 310 miles laid with 88½-lb. bull-headed rails, and 2 short lengths of about 2 miles laid with 75-lb. double-headed rails.

Above Allahabad the main line up to Fatehpur (mile 636) is laid with 85-lb. bull-headed rails. The sections Fatehpur to Kanchausi (about 90 miles), Tundla to Barhan (6 miles) and Khurja to Patpore (about 50 miles) are laid with 88½-lb. bull-headed rails. The rest of the main line and branches are laid with 75-lb. double-headed rails.

The Grand Chord line is laid with 85-lb. rails, between Sitarampore and Gurpa, and with 88½-lb. bull-headed rails, between Gurpa and mile 339, near Sone East Bank (excepting a length of 5 miles) and between mile 375 (near Pusauli) and Moghal Sarai and on the newly opened down track between Gya and Kastha and Ganj Khwaja and Moghal Sarai. The remaining length is laid with 75-lb. double-headed rails.

Of the Howrah-Burdwan chord, the Bally-Manirampur and Jangram-Saktighar sections are laid with 90-lb. flat-footed, and the rest with 88½ lb. bull-headed, rails.

The Deoghur and Tarkessur branches are laid with 75-lb. double-headed rails and the Nalhati branch with 88½-lb. bull-headed rails.

As at present laid, about thirty per cent of the sleepers are wooden and the remainder iron. The wooden sleepers principally consist of sâl and deodar; but of late jarrah and Australian hard wood sleepers have also been put into the road. The chairs are cast iron and vary in weight from 36 to 51½ lbs. The iron sleepers are of the Denham-Olpherts' pattern and weigh about 252 lbs. each.

Ballast.—The line, with the exception of the Howrah-Burdwan chord and the Barharwa-Bandel branch, is ballasted throughout with stone.

Fencing.—The line is fenced throughout, except on the Damoodur, Ikrah, Salanpur, Chanch, Pandra, Azimganj, Barun-Daltonganj, Shikohabad-Farukhabad, Barharwa-Bandel and Deoghur branches, the Ondal loop and the Ondal-Sainthia and Dhanbad-Jharia chords.

Curves.—The sharpest curve is of 1,000 feet radius and situate between Agra (Jumna Bridge station) and Agra City station.

EAST INDIAN RAILWAY SYSTEM—*contd.*

East Indian railway (5′ 6″ gauge)—*contd.*

Details of construction—*concld.*

Gradients.—The ruling gradient on the main line is 1 in 300, except between Raneegunge and Luckeeserai where it is 1 in 200 with a 1 in 100 banking section, between Simultala and Jhajha, and on the Grand Chord, 1 in 200 (compensated on curves), with a 1 in 80 banking section between Gurpa and Gujhandi. The ruling gradient on the Tarkessur branch, is 1 in 500, on the Howrah-Burdwan chord and the Shikohabad-Farukhabad branch 1 in 400, on the Daltonganj branch, 1 in 333, on the Patna-Gya and Digha Ghat branches, 1 in 250. On the Bandel-Barharwa branch, the Loop line, the Monghyr branch, the Ondal-Sainthia chord, the Khurja-Hapur branch and the Jubbulpore branch, it is 1 in 200; on the Azimganj branch, 1 in 100, and on the Deoghur branch 1 in 50.

Contracts and agreement—

Contract, dated the 22nd December 1879 (called the principal contract) *between the Secretary of State and the East Indian Railway Company*, as to the maintenance, management and working of the undertaking.

Agreement, dated the 27th July 1882, *between the Secretary of State and the East Indian Railway Company*, as to the working of the Kurhurbaree and Serampore collieries.

Contract, dated the 10th November 1893 (supplemental to the contract of 1879), *between the Secretary of State and the East Indian Railway Company*, as to the incorporation in the undertaking of certain State branch lines.

Contract, dated the 26th February 1896 (supplemental to the contract of 1879), *between the Secretary of State and the East Indian Railway Company*, as to the raising of capital by debentures.

Contract, dated the 22nd November 1897 (supplemental to the contracts of 1879 and 1896), *between the Secretary of State and the East Indian Railway Company*, as to the construction and working of the Moghal Sarai-Gya railway.

Contract, dated the 4th April 1899 (supplemental to the contract of 1879), *between the Secretary of State and the East Indian Railway Company*, as to the creation of debenture stock.

Contract, dated the 14th November 1899 (modifying the contract of the 22nd December 1879 as supplemented by the contracts of 1896 and 1899), *between the Secretary of State and the East Indian Railway Company.*

Contract, dated the 16th April 1903 (supplemental to the contracts of 1899, and to those of 1879, 1896 and 1899 therein referred to), *between the Secretary of State and the East Indian Railway Company*, as to the adoption of 1*s.* 4*d.* per rupee as the "prescribed" rate of exchange.

Contract, dated the 10th July 1907 (supplemental to the contracts of 1879, 1899 and 1903), *between the Secretary of State and the East Indian Railway Company*, as to the creation of a 3½ per cent Debenture stock.

Contract, dated the 25th October 1911, *between the Secretary of State, the Deoghur Railway Company and the East Indian Railway Company*, as to the transfer to the Secretary of State of the Deoghur railway and its management, maintenance and working by the East Indian Railway Company as a part of the undertaking.

Contract, dated the 10th June 1914, *between the Secretary of State and the East Indian Railway Company*, as to the adoption of the Government Financial year for the preparation of accounts.

Contract, dated the 3rd May 1915, *between the Secretary of State and the East Indian Railway Company*, as to the creation of 4½ *per cent.* Debenture Stock.

Main provisions of contracts and agreement—

(i) *Land.*—Provided by the Government at the cost of capital.

(ii) *Government aid.*—Guarantee of interest in sterling at 4 per cent per annum on £6,550,000, the capital sum representing the deferred portion (one-fifth) of the annuity payable by Government in purchase of the East Indian railway. Also guarantee of principal and interest in respect of debentures and debenture stock issued by the Company.

(iii) *Distribution of profits.*—The surplus profits in each half-year remaining after payment of interest and annuity charges, and the contribution to the Provident Fund, to be divided as follows:—

Of the first Rs. 25,00,000 of such surplus profits (or of the whole amount when it does not exceed Rs. 25,00,000) the Government to receive four-fifths and the Company one-fifth; of any excess beyond Rs. 25,00,000 the Government to receive fourteen-fifteenths and the Company one-fifteenth.

(iv) *Rates and fares.*—Maximum and minimum rates and fares to be authorised, and the classification of passengers and goods to be prescribed, by the Government.

(v) *Special obligations as to the conveyance of—*

(*a*) Mails, troops, high Government officials and Government stores.—To be conveyed on same general conditions, and at rates (to be approved by the Government) not less than those in force for the time being for similar services on State railways of the same gauge.

(*b*) Government bullion and coin, and the persons in charge thereof.—To be carried at special rates to be from time to time approved by the Government.

EAST INDIAN RAILWAY SYSTEM—*contd.*

East Indian railway (5′ 6″ gauge)—*concld.*

Main provisions of contracts and agreement—*concld.*

(vi) *Power of the Government to determine contract.*—
(vii) *Power of the Company to surrender contract.*— } By the contract of the 14th November 1899 the Government and the Company mutually agree that they will not determine the contract dated the 22nd December 1879 before the 31st December 1919. On that date, or at the end of any succeeding fifth year thereafter, either party may determine the contract by giving two years' previous notice. (On the determination of the contract the portion of the annuity that has been deferred will become payable for the period remaining up to the 14th February 1953.)

(viii) *Term of contract* [*if not determined under* (vi) *and* (vii)].—50 years from 1st January 1880.

Statistics of working (Those for 1879 will be found in Appendix 38 to the Railway Administration Report for 1907.)—

Year.	Mileage open at end of each year.	Total capital outlay, including suspense, to end of each year, *i.e.*, outlay on (i) lines open and (ii) lines partly or wholly under construction.	Gross earnings.	Net earnings.	Percentage of net earnings on total capital outlay given in column (3).	Interest.	Annuity.	Company's share of surplus profits (based on terms of contract) *attributable to each year.*	Gain to the State *pertaining to each year.*	Earnings per mile per week.	Proportion of expenses to earnings.
1	2	3	4	5	6	7	8	9	10	11	12
	Miles.	Rs.	Rs.	Rs.		Rs.	Rs.	Rs.	Rs.	Rs.	
1880.	1,504·25	34,18,12,052	4,29,45,116	2,84,66,874	8·33	*a*1,96,03,398	...	17,72,690	70,90,786	549	33·71
1881.	1,506·75	34,67,27,455	4,54,11,472	3,06,38,827	8·84	30,27,492	1,72,92,000	20,63,867	82,55,468	578	32·53
1882.	1,506·77	34,83,42,743	4,71,17,594	2,94,15,386	8·44	31,83,022	1,72,92,000	17,88,073	71,52,291	601	37·57
1883.	1,509·46	35,02,20,413	4,94,67,085	3,08,77,691	8·82	33,68,151	1,75,10,887	19,99,731	79,98,922	630	37·58
1884.	1,509·46	35,34,09,667	4,38,38,714	2,70,76,204	7·66	34,79,206	1,77,35,384	11,72,323	46,89,291	558	38·24
1885.	1,514·99	35,61,22,471	4,63,86,889	2,97,35,295	8·35	36,22,093	1,79,65,714	16,29,502	65,17,986	589	35·90
1886.	1,514·86	35,80,42,570	4,66,70,853	3,02,20,962	8·44	37,84,444	1,89,50,137	14,97,276	59,89,105	591	35·25
1887.	1,513·36	35,85,11,962	4,60,65,661	3,09,98,517	8·65	38,48,886	1,92,13,333	15,87,259	63,49,039	583	32·71
1888.	1,513·45	35,82,32,469	4,54,36,902	3,00,27,370	8·38	38,60,374	2,03,43,530	11,64,693	46,58,773	567	33·91
1889.	1,525·44	35,98,56,817	4,49,57,901	2,91,14,970	8·09	39,98,237	2,09,60,000	8,31,347	33,25,386	557	35·24
1890.	1,525·44	36,00,54,709	4,34,39,355	2,95,24,546	8·20	39,95,919	2,03,43,530	10,37,019	41,48,078	538	32·03
1891.	1,525·44	35,94,69,179	4,94,85,230	3,56,54,312	9·92	37,33,297	1,86,94,054	26,45,392	1,05,81,569	615	27·95
1892.	1,610·27	36,51,42,775	4,88,55,105	3,48,16,719	9·54	37,25,754	2,06,47,164	20,88,760	83,55,041	587	28·73
1893.	1,610·73	37,17,65,626	*b*5,08,44,654	3,60,94,293	9·71	41,26,889	2,34,46,780	17,04,125	68,16,499	584	29·01
1894.	1,664·11	37,50,81,624	5,26,89,485	3,64,26,405	9·71	43,37,988	2,43,89,582	15,39,767	61,59,068	604	30·87
1895.	1,700·19	38,08,79,764	*c*5,41,50,856	*c*3,78,34,726	9·93	45,73,671	2,61,01,132	14,29,078	57,30,845	603	30·13
1896.	1,701·11	38,54,11,272	*d*5,40,69,142	*d*3,67,77,682	9·54	46,90,562	2,58,59,455	12,45,733	49,81,932	597	31·98
1897.	1,705·09	39,66,36,442	5,88,28,013	4,14,93,460	10·46	48,20,238	2,47,34,406	23,87,763	95,51,053	649	29·47
1898.	1,712·25	40,98,39,605	5,97,96,060	4,08,07,269	9·96	50,46,514	2,32,64,533	24,99,244	99,96,978	658	31·76
1899.	1,710·67	42,96,85,477	6,35,45,974	4,26,60,018	9·93	54,63,902	2,21,46,516	30,09,920	1,20,39,680	697	32·87
1900.	1,840·32	44,54,88,809	6,84,74,972	4,47,15,571	10·04	60,18,054	2,15,60,963	18,09,104	1,53,27,450	708	34·70
1901.	1,838·04	45,95,76,136	7,03,96,636	4,57,13,311	9·95	65,46,878	2,16,82,360	18,51,450	1,56,32,623	733	35·06
1902.	1,923·35	47,43,55,297	6,77,38,713	4,29,80,833	9·06	70,34,492	2,16,46,868	16,19,965	1,26,79,502	687	36·55
1903.	1,935·11	48,80,34,496	6,99,72,700	4,64,35,793	9·51	74,46,371	2,16,15,000	18,24,961	1,55,49,461	692	33·64
1904.	1,932·87	50,26,09,029	7,59,71,544	5,06,03,115	10·07	80,23,978	2,16,15,000	20,64,276	1,88,99,861	749	33·39
1905.	1,972·30	52,58,72,727	7,50,47,139	4,82,21,979	9·17	86,75,860	2,16,15,000	18,62,075	1,60,69,044	738	35·74
1906.	2,165·04	54,79,28,490	8,02,50,910	*e*4,87,53,855	8·90	93,88,271	2,16,15,000	18,50,039	1,59,00,545	*f*721	*f*38·65
1907.	2,208·29	56,77,47,625	8,11,29,807	*e*4,84,10,858	8·53	1,01,66,204	2,16,15,000	17,75,310	1,48,54,344	*f*673	*f*39·74
1908.	2,213·18	58,74,01,148	8,28,51,108	*e*4,44,26,132	7·56	1,09,27,823	2,16,15,000	14,58,887	1,04,24,422	*f*682	*f*45·80
1909.	2,212·07	60,27,01,643	*g*8,28,35,189	*e*4,77,90,961	7·93	1,15,88,058	2,16,15,000	16,39,194	1,29,48,709	*f*695	*f*41·73
1910.	2,212·77	60,82,23,218	8,60,42,147	*e*5,20,01,256	8·54	1,18,60,704	2,16,15,000	19,01,703	1,66,22,849	*f*722	*f*39·01
1911.	2,265·86	62,08,94,930	9,22,36,385	*e*5,59,09,918	9·00	1,21,80,902	2,16,15,000	21,40,674	1,99,72,242	*f*756	*f*38·87
1912.	2,331·09	63,49,50,982	10,15,50,003	*e*6,32,20,565	9·96	1,26,75,172	2,16,15,000	25,95,359	2,63,35,034	*f*810	*f*37·27
1st qr. of 1913	2,359·40	64,01,66,586	2,58,28,008	*e*1,49,21,567	2·33	32,55,583	54,03,750	5,84,149	56,78,085	*f*814	*f*41·77
1913-14	2,424·20	66,70,44,170	10,26,92,832	*e*6,13,38,002	9·20	1,35,41,326	2,16,15,000	24,12,112	2,37,69,564	*f*789	*f*39·81
1914-15.	2,445·63	70,53,95,287	10,35,97,327	*e*6,25,79,018	8·87	1,48,99,653	2,16,15,000	24 04,291	2,36,60,074	*f*796	*f*38 16
1915-16.	2,448·22	71,50,37,347	10,51,90,203	*e*6,39,64,189	8·95	1,60,07,057	2,16,15,000	24,22,809	2,59,19,323	*f*800	*f*39·19
1916-17.	2,495·26	72,11,24,810	11,08,91,903	*e*7,00,05,890	9·71	1,62,94,019	2,16,15,000	28,96,458	2,92,90,413	*f*823	*f*35·94
1917-18.	*h*2,463·77	*f*72,16,13,786	11,77,52,286	*ei*7,67,40,842	10·63	1,63,44,008	2,16,15,000	32,52,122	3,55,29,712	*f*890	*f*34·18

(*a*) Interest in 1880 includes annuity charges, which cannot be separated.
(*b*) Includes arrear credits for substantial improvements, Rs. 10,49,127.
(*c*) Includes Rs. 14,530 realised from Palmer's Trust Estate.
(*d*) Excludes Rs. 1,000 paid to Mr. Patterson, Law Agent, as remuneration in respect of the amount realised from the Palmer's Trust Estate.
(*e*) Excludes the annual rental paid to the South Bihar Railway Company together with interest on Government advances for the purposes of this railway.
Includes the South Bihar railway.
(*g*) Includes arrear credits for substantial improvements, Rs. 26,19,763.
(*h*) The decrease is due to the dismantling of 31·55 miles, Bhagalpur to Mandar Hill, of the Bhagalpur Bausi branch.
(*i*) Excluding Rs. 53,065 paid to the Burdwan-Katwa railway to make up guaranteed interest on paid up capital.

EAST INDIAN RAILWAY SYSTEM—*contd*

Delhi-Umballa-Kalka railway (5′ 6″ gauge)—

Chairman.—Alexander Izat, Esq., C.I.E.
Secretary.—E. A. Neville, Esq.
Offices.—237, Gresham House, Old Broad Street, London, E.C.
Date of registration of the Company.—25th January 1889.

Progress in opening—

Sections of railway.	Date of opening.	Miles.	Total.
1	2	3	4
Main line.—			
Delhi to Kalka	1-3-91	161·88	
Kaithal branch.—			
Kurukshetra to Kaithal	1-12-10	29·76	
British section of Jind-Panipat railway—			
Panipat Junction to 2·45 miles from Madlauda	1-11-16	14·76	
TOTAL	...	...	206·40

Details of construction—

Permanent-way.—The permanent-way consists of double-headed steel rails, 75 lbs. to the yard, laid on Denham-Olpherts' cast-iron plate and wooden sleepers with cast-iron chairs. On the Kaithal branch 75-lb. flat-footed steel rails have been used.

Ballast.—The Main line and Kaithal branch are ballasted with stone. The British section of the Jind-Panipat railway is at present packed with earth except at bridge approaches.

Fencing.—The Main line and Kaithal branch are fenced. The British section of the Jind-Panipat railway is fenced round station-yards at important road-crossings and villages.

Curves.—The sharpest curve is of 1,010 feet radius.

Gradients.—The ruling gradient is 1 in 200, except for 15 miles from Kalka where it is 1 in 40.

Contracts—

Dated the 24th January 1889 (called the principal working contract), *between the Secretary of State and the East Indian Railway Company*, for working and maintenance.

Dated the 12th February 1889 (called the principal contract), *between the Secretary of State and the Delhi-Umballa-Kalka Railway Company* for the construction of the railway.

Dated the 19th March 1890 (supplemental to the contract of 1889), *between the Secretary of State and the Delhi-Umballa-Kalka Railway Company*, as to the raising of additional capital by the issue of debentures.

Dated the 19th December 1895 (supplemental to the contract of 1889), *between the Secretary of State and the Delhi-Umballa-Kalka Railway Company*, conceding to the Company, from the 1st January 1893, the 2 per cent of gross earnings previously retained by Government.

Dated the 21st July 1896 (supplemental to the contract of 1889), *between the Secretary of State and the East Indian Railway Company*, as to the provision of funds for further capital works.

Dated the 24th July 1896 (supplemental to the contracts of 1889 and 1890), *between the Secretary of State and the Delhi-Umballa-Kalka Railway Company*, as to the provision of funds for further capital works.

Dated the 9th June 1897 (supplemental to the contracts of 1889, 1890 and 1895), *between the Secretary of State and the Delhi-Umballa-Kalka Railway Company*, guaranteeing interest at the rate of 3¼ per cent on share capital.

Dated the 27th April 1903 (supplemental to the contract of 1889), *between the Secretary of State and the Delhi-Umballa-Kalka Railway Company*, as to the adoption of 1*s.* 4*d.* per rupee as the "prescribed" rate of exchange.

Dated the 1st July 1909 (supplemental to the contracts of 1889 and 1896), *between the Secretary of State and the East Indian Railway Company*;
Dated the 3rd November 1909 (supplemental to the contracts of 1889, 1890, 1895, 1896, 1897 and 1903), *between the Secretary of State and the Delhi-Umballa-Kalka Railway Company*;
} as to the working and construction, respectively, of the Kaithal branch.

Dated the 8th April 1914, *between the Secretary of State and the Delhi-Umballa-Kalka Railway Company*, as to the adoption of the Government Financial year for the preparation of accounts.

Main provisions of contracts—

(i) *Land.*—To be provided by the Government free of cost to the Company.

(ii) *Government aid.*— } The Government undertake (through the agency, in the first instance, of the
(iii) *Terms of working.*— } East Indian Railway Company) to supply the necessary rolling-stock and to work and maintain the line until the 31st December 1926, taking 48 per cent of the gross receipts of the railway for the working agency and paying 52 per cent to the Company. By the contract of 9th June 1897 Government supplement the net earnings of the Company for the year 1896 and each succeeding year by such an annual subsidy as will enable the Company, after payment of debenture interest, to pay a dividend of 3¼ per cent per annum on its share capital.

(iv) *Distribution of profits.*—Surplus profits in any year in excess of 3¼ per cent per annum on share capital are divided equally between the Government and the Company until the Government has been repaid amounts advanced by way of subsidy, with interest. Thereafter all surplus profits will belong to the Company.

(v) *Rates and fares.*—To be agreed upon between the Government and the working agency; but between Delhi and Umballa not more than the maximum, nor less than the minimum, in force on the East Indian railway, and between Umballa and Kalka not more than three times such maximum nor less than such minimum.

EAST INDIAN RAILWAY SYSTEM—*contd.*

Delhi-Umballa-Kalka railway (5′ 6″ gauge)—*concld.*

Main provisions of contracts—*concld.*

(vi) *Special obligations as to the conveyance of.*—
(*a*) Mails, troops, high Government officials and Government stores.—
(*b*) Government bullion and coin, and the persons in charge thereof.— } Nil.

(vii) *Power of the Government to determine contract.*—The Government may determine the contract on the previous determination of the Principal Contract or on the 31st December 1926, or on the 31st December of any subsequent tenth year. On determination Government are to receive possession of the railway, and to pay the Company a sum equal to 25 times the average yearly profits of the Company during the preceding five years. Payments by the Government by way of subsidy under the contract of the 9th June 1897 and also the additional 2 per cent of gross earnings conceded to the Company under the contract of the 19th December 1895 are to be excluded from the profits of the Company in calculating the price to be paid by the Government.

(viii) *Power of the Company to surrender contract.*—Nil.

(ix) *Term of contract* [*if not determined under* (vii)].—Not specified.

Statistics of working (including the Jind-Panipat railway (Native State section) from 1916–17.)—

Year.	Mileage open at end of each year.		Total capital outlay, including suspense, to end of each year, *i.e.*, outlay on (i) lines open and (ii) lines partly or wholly under construction.		Gross earnings.	Net earnings.		Percentage of net earnings on total capital outlay, given in columns (4) & (5).		Delhi-Umballa-Kalka Railway, including British section of Jind-Panipat Railway.			Earnings per mile per week.	Proportion of expenses to earnings.
	Delhi-Umballa-Kalka railway, including British section of Jind-Panipat railway.	Native State section of Jind-Panipat railway.	Delhi-Umballa-Kalka railway, including British section of Jind-Panipat railway.	Native State section of Jind-Panipat railway.		Delhi Umballa-Kalka railway, including British section of Jind-Panipat railway.	Native State section of Jind-Panipat railway.	Delhi Umballa Kalka Railway including British section of Jind-Panipat railway.	Native State section of Jind-Panipat railway.	Subsidy from Government.	Total income.	Percentage of total income on total capital outlay given in column (4).		
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
	Miles.	Miles.	Rs.	Rs.	Rs.	Rs.	Rs.			Rs.	Rs.		Rs.	
1891	162·24	...	1,55,44,692	...	9,07,697	4,72,002	...	3·04	...	...	4,72,002	3·04	128	48·00
1892	161·40	...	1,58,22,137	...	10,81,769	5,62,520	...	3·56	...	...	5,62,520	3·56	129	48·00
1893	161·40	...	1,55,24,600	...	11,98,508	6,23,224	...	4·01	...	...	6,23,224	4·01	143	48·00
1894	161·40	...	1,55,25,547	...	13,37,526	6,95,514	...	4·48	...	...	6,95,514	4·48	159	48·00
1895	161·40	...	1,55,06,120	...	14,60,519	7,59,470	...	4·90	...	...	7,59,470	4·90	174	48·00
1896	160·47	...	1,54,49,783	...	13,18,840	6,85,797	...	4·44	...	...	6,85,797	4·44	158	48·00
1897	162·24	...	1,53,26,585	...	15,73,319	8,18,126	...	5·34	...	...	8,18,126	5·34	186	48·00
1898	162·24	...	1,53,43,587	...	16,07,512	8,35,906	...	5·45	...	...	8,35,906	5·45	191	48·00
1899	162·24	...	1,53,01,272	...	14,49,378	7,53,677	...	4·93	...	...	7,53,677	4·93	172	48·00
1900	162·24	...	1,53,15,467	...	13,72,523	7,13,712	...	4·66	...	...	7,13,712	4·66	163	48·00
1901	162·24	...	1,52,92,648	...	18,05,858	9,39,046	...	6·14	...	...	9,39,046	6·14	213	48·00
1902	162·24	...	1,54,23,791	...	18,66,695	9,70,681	...	6·29	...	...	9,70,681	6·29	221	48·00
1903	162·36	...	1,55,49,998	...	18,30,960	9,52,099	...	6·12	...	...	9,52,099	6·12	216	48·00
1904	162·36	...	1,55,51,763	...	18,53,475	9,63,807	...	6·20	...	...	9,63,807	6·20	218	48·00
1905	162·36	...	1,56,97,499	...	20,16,936	10,48,807	...	6·72	...	...	10,48,807	6·72	238	48·00
1906	162·36	...	1,57,26,333	...	20,04,218	10,42,194	...	6·63	...	...	10,42,194	6·63	237	48·00
1907	162·36	...	1,58,23,198	...	23,04,659	11,98,423	...	7·57	...	...	11,98,423	7·57	272	48·00
1908	162·36	...	1,60,07,122	...	21,09,189	10,96,778	...	6·85	...	...	10,96,778	6·85	250	48·00
1909	162·36	...	1,66,56,595	...	22,90,710	11,91,169	...	7·15	...	...	11,91,169	7·15	271	48·00
1910	192·13	...	1,75,45,512	...	26,05,803	13,55,018	...	7·72	...	...	13,55,018	7·72	261	48·00
1911	192·12	...	1,77,78,158	...	31,53,021	16,39,571	...	9·22	...	...	16,39,571	9·22	316	48·00
1912	192·12	...	1,79,12,579	...	32,30,326	16,79,769	...	9·38	...	...	16,79,769	9·38	323	48·00
1st qr. of 1913	192·12	...	1,79,84,924	...	8,36,556	4,35,009	...	2·43	...	...	4,35,009	2·43	335	48·00
1913-14	192·12	...	1,80,32,784	...	31,67,202	16,46,945	...	9·13	...	...	16,46,945	9·13	317	48·00
1914-15	191·64	...	1,84,33,052	...	32,15,603	16,72,114	...	9·07	...	...	16,72,114	9·07	323	48·00
1915-16	191·64	...	1,92,01,786	...	31,82,987	16,55,153	...	8·62	...	...	16,55,153	8·62	319	48·00
1916-17	206·40	25·90	1,94,98,488	15,99,054	36,59,888	18,85,843	17,299	9·67	1·08	...	18,85,843	9·67	363	48·00
1917-18	206·40	25·90	1,95,27,500	16,71,021	44,31,206	22,47,872	56,355	11·51	3·37	...	22,17,872	11·51	367	48·00

Jind-Panipat railway (Native State Section) (5′ 6″ gauge)—

This line is the portion of the Jind-Panipat railway which lies within the limits of Jind territory; the portion lying in British territory forms an integral part of the Delhi-Umballa-Kalka railway. Its construction by the Agency of the Delhi-Umballa-Kalka Railway Company was authorised by the Railway Board in their letter No. 2477-R.C., dated the 11th September 1913.

Progress in opening—

Section of railway.	Date of opening.	Miles.	Total.
1	2	3	4
2·45 miles from Madlauda to Jind city on the Southern Punjab railway	1-11-16	25·90	25·90

EAST INDIAN RAILWAY SYSTEM—*contd.*

Jind-Panipat Railway (Native State Section) (5′ 6″ gauge)—*concld.*

Details of construction—

Permanent-way.—The permanent-way consists of second-hand 75-lb. double-headed steel rails on wooden and Denham-Olphert's sleepers.

Ballast.—The line is at present packed with earth, except at bridge approaches where brick ballast has been used.

Fencing.—The line is fenced only round station-yards and at important road-crossings and villages.

Curves.—The sharpest curve has a radius of 3,820 feet.

Gradient.—The ruling gradient is 1 in 250.

Agreement.—The line is being maintained and worked under the terms of an agreement which is under consideration.

Statistics of working—

Included with the Delhi-Umballa-Kalka railway.

South Bihar railway (5′ 6″ gauge)—

Chairman.—Sir Henry S. Cunningham, K.C.I.E.

Acting Secretary.—Percy A. Cory, Esq.

Offices.—91, York Street, Westminster, S. W.

Date of registration of the Company.—4th July 1895.

Progress in opening—

Sections of railway.	Date of opening.	Miles.	Total.
1	2	3	4
Luckeeserai to Wazirganj	5-7-99	79·19	79·19
Wazirganj to Gya	10-7-99		

Details of construction—

Permanent-way.—The permanent-way consists of double-headed steel rails 75 lbs. to the yard, laid on wooden sleepers and cast-iron chairs and Denham-Olpherts' cast-iron plate sleepers.

Ballast.—The line is ballasted throughout with stone.

Fencing.—The line is fenced only near villages, at stations and for a short distance on each side of level crossings.

Curves.—The sharpest curve is of 3,000 feet radius.

Gradients.—The ruling gradient is 1 in 400.

Contracts—

Dated the 7th August 1895 (called the principal contract), *between the Secretary of State and the South Bihar Railway Company,* as to construction.

Dated the 22nd August 1895 (called the contract of 1895), *between the Secretary of State and the East Indian Railway Company,* as to maintenance and working.

Dated the 21st April 1903 (supplemental to the contract of 1895), *between the Secretary of State and the South Bihar Railway Company,* as to the adoption of 1*s* 4*d*. per rupee as the "prescribed" rate of exchange.

Dated the 11th December 1906 (supplemental to the contract of 1895), *between the Secretary of State and the South Bihar Railway Company,* as to the lease of the South Bihar railway to the Secretary of State and yearly payment to the Company until date of determination of the contract of the 7th August 1895.

Dated the 16th January 1907, *between the Secretary of State and the East Indian Railway Company,* as to working the South Bihar railway as part of the Company's undertaking.

Main provisions of contracts—

(i) *Land.*—Provided by the Government free of cost to the Company.

(ii) *Government aid.*—
(iii) *Terms of working.*—
(iv) *Distribution of profits.*—

Government constructed the line, from funds provided by the South Bihar Railway Company, and maintained, stocked and worked it through the agency of the East Indian Railway Company up to the 31st December 1905, for a certain proportion of its gross earnings; and, by agreement with the East Indian Railway Company, also allowed to the South Bihar Railway Company, by way of rebate, a percentage of the East Indian Railway's share of the receipts from traffic interchanged between the two railways towards making up an amount equal to 4 per cent interest for each half-year on the actual capital expenditure (subject to certain limits) on the South Bihar railway.

With effect from the 1st January 1906 the South Bihar Railway Company leased its line to the Government for a yearly sum of £30,000, payable by half-yearly payments of £15,000, at the end of each calendar half-year, in substitution of the corresponding provisions of the principal contract of the 7th August 1895.

As between the Government and the East Indian Railway Company the South Bihar railway as from 1st January 1906 is worked as part of the undertaking of the Company, who pay to the Government from the net half-yearly revenue of the undertaking the half-yearly sum of £15,000 and also interest for each half-year at 3½ per cent per annum on Rupees 7,63,099-1-11, being the amount of capital advances made by the Government for the purposes of the South Bihar railway-

EAST INDIAN RAILWAY SYSTEM—*concld.*

South Bihar railway (5′ 6″ gauge)—*concld.*

(v) *Rates and fares.*—
(vi) *Special obligations as to the conveyance of.*—
(*a*) Mails, troops, high Government officials and Government stores.—
(*b*) Government bullion and coin, and the persons in charge thereof.—
} As under the East Indian railway.

(vii) *Power of the Government to determine contracts.*—Government may determine the South Bihar Railway Company's contracts on the 30th June 1919, or on the 30th June in the last year of any subsequent period of 10 years from that date, by giving twelve months' notice. In case of such determination the Government will pay to the Company in England £684,580, as being the capital expended on the undertaking with the authorisation of the Secretary of State.

The East Indian Railway Company's contracts terminate at the same time as the Company's contract of 1879, for which see under East Indian railway.

(viii) *Power of the South Bihar Railway Company to surrender contracts.*—Nil.
(ix) *Power of the East Indian Railway Company to surrender contracts.*—As under (vii).
(x) *Term of South Bihar Railway Company's contracts* [*if not determined under* (vii)].—Not specified.
(xi) *Term of East Indian Railway Company's contracts.*—As under (vii).

Statistics of working—

Year.	Mileage open at end of each year.	Total capital outlay, including suspense, to end of each year, *i.e.*, outlay on (i) lines open and (ii) lines partly or wholly under construction.	Gross earnings.	Net earnings.	Percentage of net earnings on total capital outlay given in column (3).	Rebate from the East Indian railway.	Total income.	Percentage of total income on total capital outlay given in column (3).	Earnings per mile per week.	Proportion of expenses to earnings.
1	2	3	4	5	6	7	8	9	10	11
	Miles.	Rs.	Rs.	Rs.		Rs.	Rs.		Rs.	
1899 . .	78·83	1,18,16,730	2,03,328	1,32,163	1·12	33,403	1,65,566	1·40	100	35·00
1900 . .	76·76	1,23,15,110	4,67,133	3,03,636	2·47	1,44,404	4,48,040	3·64	114	35·00
1901 . .	78·76	1,23,66,533	5,14,870	3,08,822	2·50	1,28,082	4,36,904	3·53	125	40·02
1902 . .	78·76	1,19,88,612	4,99,809	2,74,895	2·29	1,35,445	4,10,340	3·42	122	45·00
1903 . .	78·76	1,20,01,897	5,24,605	2,88,533	2·40	1,57,708	4,46,241	3·72	128	45·00
1904 . .	78·76	1,19,72,914	5,70,358	3,13,697	2·62	1,65,382	4,79,079	4·00	138	45·00
1905 . .	78·76	1,19,77,154	5,55,199	3,05,360	2·55	1,72,721	4,78,081	3·99	135	45·00
1906 . .	78·76	1,19,74,947								
1907 . .	78·76	1,19,77,154								
1908 . .	79·19	1,19,77,154								
1909 . .	79·19	1,19,77,154								
1910 . .	79·19	1,19,77,154								
1911 . .	79·19	1,19,77,154	See "terms of working" above.							
1912 . .	79·19	1,19,77,154								
1st qr. of 1913.	79·19	1,19,77,154								
1913-14 .	79·19	1,19,77,154								
1914-15 .	79·19	1,19,77,154								
1915-16 .	79·19	1,19,77,154								
1916-17 .	79·19	1,19,77,154								
1917-18	79·19	1,19,77,154								

GREAT INDIAN PENINSULA RAILWAY SYSTEM.

Chairman.—Sir Charles Herbert Armstrong.

Secretary.—R. H. Walpole, Esq.

Offices.—48, Copthall Avenue, London, E. C.

Date of registration of the former Guaranteed Company.—1853.

Lines comprised in the system.—The Great Indian Peninsula railway system is made up of—

	Open line.	Under construction or sanctioned for construction.	Total.
	Miles.	Miles.	Miles.
(*a*) Great Indian Peninsula railway (5′ 6″ gauge)	2,553·13	114·94	2,668·07
(*b*) Agra-Delhi Chord railway (5′ 6″ gauge)	125·88	...	125·88
(*c*) Baran-Kotah railway (5′ 6″ gauge)	40·29	...	40·29
(*d*) Bhopal-Itarsi railway (5′ 6″ gauge)	57·22	...	57·22
(*e*) Bhopal-Ujjain railway (5′ 6″ gauge)	113·28	...	113·28
(*f*) Bina-Goona-Baran railway (5′ 6″ gauge)	147·07	...	147·07
(*g*) Cawnpore-Banda railway (5′ 6″ gauge)	75·71	...	75·71
(*h*) Dhond-Baramati railway (2′ 6″ gauge)	27·26	...	27·26
(*i*) Ellichpur-Yeotmal railway (2′ 6″ gauge)	117·66	...	117·66
(*j*) Pulgaon-Arvi railway (2′ 6″ gauge)	21·83	...	21·83
(*k*) Matheran Light railway (2′ 0″ gauge	12·61	...	12·61
(*l*) Pachora-Jaunner railway (2′ 6″ gauge)	...	34·62	34·62
Total	3,291·94	149·56	3,441·50

Running powers—

Home line over foreign lines :—

Dadar junction to Colaba, 7·25 miles, for goods trains only and at Ujjain, 0·24 mile for passenger and goods trains, Bombay, Baroda and Central India railway	7·49
Idgah to Agra Fort, Bombay, Baroda and Central India railway, for passenger and goods trains	1·32
At Cawnpore, 0·97 mile for passenger and 0·52 mile for goods trains only, at Manikpur, 0·63 mile for passenger and goods trains, at Katni, 0·38 mile for goods trains only and between Belanganj and Jumna Bridge Goods Depot, 1·86 miles for goods trains, East Indian railway	4·36
At Cawnpore, 0·86 mile for passenger and goods trains and between Cawnpore and Lucknow, 44·63 miles for passenger trains only, Oudh and Rohilkhand railway	45·49
At Katni, 1·60 miles for passenger and between Nagpur and Itwari Bazar, 1·73 miles for goods trains, Bengal-Nagpur railway	3·33
Total	61·99

Foreign lines over home line :—

Bengal-Nagpur railway, at Nagpur, for passenger and goods trains	0·65
Bombay, Baroda and Central India railway, Dadar Junction to Carnac Bridge, for goods trains only	4·30
Bombay, Baroda and Central India railway, 90·05 miles, Muttra Junction to Delhi Junction, and 1·78 miles, Mahim to Cowari, for passenger and goods trains	91·83
East Indian railway, Belanganj junction to Agra Cantonment, for passenger trains only	3·37
Bombay, Baroda and Central India railway, Fatehpur Road junction to Belanganj junction, for goods trains only	1·04
Total	101·19

Great Indian Peninsula railway (5′ 6″ gauge)—

The Great Indian Peninsula railway comprises the line formerly owned by the old Guaranteed Company of that name (now called the Great Indian Peninsula railway proper), in amalgamation with that of the late Indian Midland Railway Company (now known as the Midland section). The Guaranteed Company's railway was purchased by the State in 1900, when all the contracts then subsisting between the Secretary of State and that Company were determined and a new Great Indian Peninsula Railway Company was constituted. The amount of the purchase price was £34,859,218, of which £33,109,218 is being paid by means of a terminable annuity of £1,268,516, the remaining £1,750,000 being represented by Company's stock issued in exchange for £67,047 of annuity. In addition to the purchase price, the debentures and debenture stock of the Company for which the Secretary of State incurred the liability on purchase amounted to £5,922,350.

The contract *between the Secretary of State and the Indian Midland Railway Company,* dated the 22nd October 1885, was determined by the Secretary of State on the 31st December 1910. That does not, however, substantially affect the carrying out of the contract, *between the Secretary of State and the Great Indian Peninsula Railway Company,* dated the 21st December 1900, the effect of which is that the railways formerly known as the "Indian Midland Railway System" are to form part of the undertaking worked by the Company for so long as that contract remains in force.

Nor are the arrangements subsisting at the date of the termination of the Indian Midland Railway Company's contract for working of the Native State branches of that Company's line disturbed in any way by the termination of that Company's contract, the necessary alterations, whereby the Government becomes a party thereto instead of the Indian Midland Railway Company, having been made in the working agreements relating to such branches. The Gwalior Light railway was worked by the Great Indian Peninsula Railway Company up to the 30th June 1913, after which date the working was taken over by the Gwalior Durbar.

GREAT INDIAN PENINSULA RAILWAY SYSTEM—*contd.*

Great Indian Peninsula railway (5′ 6″ gauge)—*contd.*

Progress in opening—

Sections of railway.	Date of opening.	Miles.	Total.	Grand total.
1	2	3	4	5
GREAT INDIAN PENINSULA RAILWAY PROPER—				
NORTH-EAST LINE—				
Main line—				
Victoria Terminus to Thana	18-4-53	21·00		
Thana to Kalyan	1-5-54	12·41		
Kalyan to Vasind	1-10-55	16·14		
Vasind to Asangaon	6-2-60	3·75		
Asangaon to Kasara	1-1-61	21·84		
Kasara to Igatpuri (Thal Ghat)	1-1-65	9·89		
Igatpuri to Nasik	28-1-61	31·43		
Nasik to Chalisgaon	1-10-61	87·24		
Chalisgaon to Jalgaon	6-10-62	57·48		
Jalgaon to Bhusaval	20-5-63	15·04		
Bhusaval to Burhanpur	20-11-65	33·73		
Burhanpur to Khandwa	3-9-66	42·78		
Khandwa to Bir	17-2-68	21·15		
Bir to Itarsi	1-1-70	89·27		
Itarsi to Sohagpur	1-2-70	30·69		
Sohagpur to Jubbulpore	8-3-70	121·65		
			615·46	
Branches—				
Itarsi-Nagpur Branch—				
Itarsi to Betul	1-5-13	66·25		
Betul to Amla	29-9-14	14·31		
Amla to Parasia	1-11-15	53·86		
			134·42	
Bombay Harbour Branch—				
Reay Road station to Kurla	12-12-10	6·19		
			6·19	
Mahim chord—				
Ravali to Mahim	12-8-14	1·30		
			1·30	
Chalisgaon-Dhulia branch—				
Chalisgaon to Dhulia	15-10-00	34·95		
			34·95	
Jalgaon-Amalner branch—				
Jalgaon to Erandol Road	20-2-00	18·26		
Erandol Road to Amalner	4-4-00	16·00		
			34·26	
Nagpur branch—				
Bhusaval Junction to Malkapur	20-5-63	30·05		
Malkapur to Shegaon	24-10-64	32·53		
Shegaon to Badnera	18-12-65	72·67		
Badnera to Pulgaon	16-7-66	40·29		
Pulgaon to Sindi	5-11-66	38·27		
Sindi to Nagpur	20-2-67	29·44		
			243·25	
Khamgaon branch—				
Jalamb to Khamgaon	4-3-70	7·97		
			7·97	
Amraoti branch—				
Badnera to Amraoti	16-2-71	5·49		
			5·49	
Balharshah branch—				
Wardha to mile 490·20	1-2-79	18·95		
Mile 490·20 to mile 512·64	24-12-75	22·44		
Mile 512·64 to Warora	26-4-76	4·00		
Warora to Balharshah	1-2-08	37·12		
			82·51	
Mohpani branch—				
Gadarvada to Mohpani	3-9-72	12·47		
Mohpani to Gotitoria	22-11-96	1·07		
Mohpani to new coal-fields	3-6-00	0·14		
			13·68	
				1,179·48
SOUTH-EAST LINE—				
Main Line—				
Kalyan to Palasdhari (Karjat)	12-5-56	30·60		
Palasdhari to Khandala (Bhore Ghat)	14-5-63	13·20		
Khandala to Poona	14-6-58	42·01		
Poona to Diksal	15-12-58	64·25		
Diksal to Barsi Junction	23-10-59	50·60		
Barsi Junction to Mohol	21-1-60	28·32		
Mohol to Sholapur	6-6-60	20·51		
Sholapur to Gulbarga	1-2-70	70·29		
Gulbarga to Krishna	1-12-70	73·76		
Krishna to Raichur	1-5-71	15·31		
			408·85	
Branches—				
Manmad branch—				
Dhond to Ahmednagar	15-3-78	50·41		
Ahmednagar to Manmad	17-4-78	95·03		
			145·44	
Khopoli branch—				
Palasdhari to Khopoli	12-5-56	7·24	7·24	
				561·53
TOTAL OPEN MILEAGE, GREAT INDIAN PENINSULA RAILWAY	...	...	...	1,741·01
MIDLAND SECTION—				
Main line (including the Scindia State railway)—				*Scindia State railway.
Bhopal to Jhansi	1-1-89	179·92		
Jhansi to Gwalior	1-3-89	60·39		
Gwalior to Hetampur*	20-12-79	32·40		
Hetampur to Dholpur*	15-5-81	8·04		
Dholpur to Agra Cantonment*	10-1-78	36·05		
Junction with Agra-Delhi Chord railway at Agra to terminal point of Belanganj Goods Depôt.	27-2-06	1·75		
Centre of Agra Cantonment (mile 834·21) to junction point with Bombay, Baroda and Central India Railway near Idgah (Agra) (mile 835·56).	1-3-05	1·35		
			319·90	
				1,741·01
CARRIED OVER	...	...	319·90	

GREAT INDIAN PENINSULA RAILWAY SYSTEM—*contd.*

Great Indian Peninsula railway (5′ 6″ gauge)—*contd.*

Progress in opening—*contd.*

Sections of railway.	Date of opening.	Miles.	Total.	Grand total.	Remarks.
1	2	3	4	5	6
Brought forward	...	...	319·90	1,741·01	
Branches—					
Manikpur branch—					
Jhansi to Mau Ranipur	5-6-89	39·96			
Mau Ranipur to Banda	1-8-89	78·96			
Banda to Manikpur	15-2-89	61·37			
			180·29		
Cawnpore branch—					
Jhansi to Chaunrah	1-2-88	94·97			
Chaunrah to Cawnpore	1-4-86	40·93			
Initial point of Cawnpore-Banda railway at Juhi to junction point with District No. 6 near Great Indian Peninsula Railway fencing at Juhi.	1-4-15	0·50			
			136·4		
Moth quarry	26-7-07	2·78			
			2·78		
Bina to point of junction with Bina-Goona-Baran railway.	1-5-95	2·00			
Bhopal to point of junction with Bhopal-Ujjain railway.	11-11-95	0·18			
			2·18		
Bina-Saugor-Katni branch—					
Bina to Saugor	5-6-89	45·25			
Saugor to Damoh	26-3-98	47·83			
Damoh to Katni	1-1-99	67·87			
Katni Murwara to Junction with Bengal-Nagpur railway.	1-1-90	0·71			
Katni Murwara to Junction with East Indian railway	1-1-99	0·34			
Junction near east mouth of tunnel (mile 837·53) to East Indian railway down point of Agra city (mile 837·57).	3-2-13	0·04			
East Indian railway down point of Agra city (mile 837·57) to Junction with East Indian railway (mile 837·60).	3-2-13	0·03			
			162·07		
Ait to Kunch	7-12-03	8·50			
			8·50		
TOTAL OPEN MILEAGE, MIDLAND SECTION	...	...	...	812·12	
TOTAL OPEN MILEAGE, GREAT INDIAN PENINSULA RAILWAY.	...	...	...	2,553·13	
UNDER CONSTRUCTION OR SANCTIONED FOR CONSTRUCTION—					
Itarsi-Nagpur branch—					
Amla to Pandhurna } Sanctioned on 8th June	...	38·80			
Pandhurna to Nagpur } 1908.	...	64·94			
			103·74		
Harbour Branch extension—overhead connection.—					
Tank Bundur to Victoria Terminus (sanctioned on 6th March 1912).	...	2·12	2·12		
Ghugus colliery branch—					
Tadali to Ghugus (sanctioned on 31st May 1917).	...	9 08			
			9·08		
				114·94	
GRAND TOTAL	...	...	...	2,668·07	
QUADRUPLE LINE—					
Victoria Terminus to Curry Road	4-12-05	4·29			
Curry Road to Thana	4-12-15	17·07			
Thana to Kalyan	17-3-16	1·59			
	1-3-17	6·67			
			29·62		
DOUBLE LINE—					
NORTH-EAST LINE—					
Main line—					
Thana to Kalyan	1-4-17	2·84			†Excluding the quadruple sections.
	1-5-54	† 2·44			
Kalyan to Vasind	22-10-66	16·14			
Vasind to Atgaon	20-2-67	9·65			
Atgaon to Kasara	25-4-67	15·94			
Kasara to Igatpuri	1-1-65	9·89			
Igatpuri to Kajgaon	10-1-69	130·54			
Kajgaon to Pachora	17-3-69	16·05			
Pachora to Maheji	27-5-69	9·14			
Maheji to Bhadli	6-3-73	27·59			
Bhadli to Bhusaval	6-6-73	7·84			
Bhusaval to Bhusaval Junction	1-7-92	0·80			
Bhusaval Junction to Khandwa (Abna Junction)	11-1-89	74·52			
Khandwa to Itarsi	16-10-05	110·48			
			33·86		
Bombay Harbour Branch—					
Reay Road Station to Kurla	2-12-10	6·19			
			6·19		
Mahim Chord—					
Ravali to Mahim	12-8-14	1·30			
			1·30		
SOUTH-EAST LINE—					
Main line—					
Kalyan to Palasdhari	25-7-70	30·61			
Palasdhari to Khandala } Bhore Ghat	14-5-63	13·20			
Khandala to Lonavla }	14-6-58	2·35			
Lonavla to Karla	29-5-07	4·92			
Karla to Talegaon	8-1-08	13·51			
Talegaon to Shelarvadi	22-5-08	7·77			
Shelarvadi to Poona	13-5-08	13·46			
			85·82		
Nagpur branch—					
Bhusaval Junction to Bodwad	11-1-89	17·98			
Bodwad to Shegaon	1-4-96	44·88			
Shegaon to Murtajapur	30-3-15	46·49			
Murtajapur to Badnera	9-11-15	25·50			
Badnera to Dhamangaon	25-1-17	28·76			
Dhamangaon to Dahegaon	1-5-17	22·24			
Dahegaon to Dhotra	12-3-18	3·11			
			6·91		
Carried over	...	...	716·03		

GREAT INDIAN PENINSULA RAILWAY SYSTEM—*contd.*

Great Indian Peninsula railway (5′ 6″ gauge)—*contd.*

Progress in opening—*concld.*

Sections of railway.	Date of opening.	Miles.	Total.	Grand total.	Remarks.
1	2	3	4	5	6
Brought forward . .	...	...	716·08		
DOUBLE LINE—*concld.*					
Midland section—					
Agra cantonment to new Junction with Agra-Delhi Chord railway near Raja-ki-Mandi.	3-2-13	2·70			
Old Junction with Agra-Delhi Chord railway near Raja-ki-Mandi (mile 837·19) to terminal point of Belanganj goods Depot (mile 838·07).	3-2-13	0·88			
Junction near east mouth of tunnel (mile 837·53) to East Indian railway down point of Agra City (mile 837·57).	3-2-13	0·04			
			3·62		
TOTAL DOUBLE LINE .	...	...	...	719·70	

Details of construction—

Permanent-way.—On the Great Indian Peninsula railway proper, the main line is laid with 100-lb. bull-headed, 82-lb. bull-headed and 69-lb. double-headed steel rails. The sleepers originally laid were chiefly wooden; these have now to a large extent been replaced by iron pots. The whole of the South-East line, except the Ghat sections, is laid with iron pots. On the Midland section, the whole of the main line, the Manikpur branch, the Cawnpore branch from Jhansi to mile 326·64 and the line from Bina to Katni, are laid with 80-lb. flat-footed steel rails on cast-iron pot sleepers. The Cawnpore branch from mile 351·77 to Hamirpur Road is laid chiefly with 82-lb. bull-headed rails on cast-iron pot sleepers. The main line between Bombay and Igatpuri and Kalyan and Lonavla is being relaid with 100-lb. bull-headed rails on wooden sleepers.

Ballast.—The line is ballasted with sand, gravel, laterite, kunkur or stone.

Fencing.—With the exception of the Mohpani, Chalisgaon-Dhulia, Jalgaon-Amalner and Warora-Balharshah branches, the Great Indian Peninsula railway proper is fully fenced. On the Midland section the main line is fenced throughout and the branches are partially fenced.

Curves.—The sharpest curve has a radius of 990 feet on the Bhore Ghat, between miles 75 and 76. The next sharpest curve has a radius of 1,056 on the Thull Ghat, between miles 78 and 79.

Gradients.—On the Great Indian Peninsula railway proper the ruling gradients on ordinary sections of the main line vary from 1 in 100 to 1 in 200, with 1 in 100 banking sections near Vasind and Asvali; the ruling gradient on the Ghat sections is 1 in 37. On the Midland section the ruling gradient between Bhopal and Jhansi is 1 in 200; between Jhansi and Agra 1 in 150 and between Jhansi and Manikpur 1 in 125. The Jhansi-Cawnpore branch is practically level, except at bridge approaches where the gradients are 1 in 250 and 1 in 300, and between Jhansi and Garhmau where it is 1 in 200.

Contracts—

Dated the 21st December 1900 (called the principal contract), *between the Secretary of State and the Great Indian Peninsula Railway Company*, as to the maintenance, management and working, by the Company, as one undertaking, of the railways known as the Great Indian Peninsula railway system and the Indian Midland railway system, and the subsidiary lines included therein.

Dated the 24th April 1903 (supplemental to the contract of 1900), *between the Secretary of State and the Great Indian Peninsula Railway Company*, as to the adoption of 1*s.* 4*d.* per rupee as the "prescribed" rate of exchange.

Dated the 4th August 1908 (supplemental to the contracts of 1900 and 1903), *between the Secretary of State and the Great Indian Peninsula Railway Company*, as to Debenture stock.

Dated the 1st August 1913 (supplemental to the contracts of 1900, 1903 and 1908), *between the Secretary of State and the Great Indian Peninsula Railway Company*, for working the Nerbudda colliery.

Dated the 3rd July 1914 (supplemental to the contracts of 1900, 1903, 1908 and 5th February* and 19th March† 1909), *between the Secretary of State and the Great Indian Peninsula Railway Company*, as to the adoption of the Government financial year for the preparation of accounts.

*See under Agra-Delhi Chord railway.
† See under Baran-Kotah railway.

Main provisions of contracts—

(i) *Land.*—Originally, *i.e.*, up to the 30th June 1900, was provided by the Government free of cost to the Company; that acquired thereafter is provided by the Government to the Company at the cost of capital.

(ii) *Government aid.*—Guarantee of interest at 3 per cent on the new capital of the Company.

(iii) *Distribution of profits.*—The working expenses of the whole undertaking are divided half-yearly between and attributed to the systems, in proportion to the gross receipts of each (the branch lines in Berar being treated as part of the Great Indian Peninsula Railway system).

From the gross receipts of each of the systems is deducted the share of its working expenses apportioned as aforesaid; and the gross earnings of each subsidiary line is charged with a share of the working expenses attributed to the system to which it belongs in the ratios which the gross receipts of such subsidiary lines bear to those of that system.

The net earnings of each year are applied :—

(1) in payment to the Secretary of State of the sum of Rs. 2,00,00,000;

(2) in repayment to the Secretary of State in rupees of all interest payable in respect of such year on all money raised after 30th June 1900 by the Company with the sanction of the Secretary of State for the purpose of the undertaking otherwise than by the issue of shares or capital stock, or provided by the Secretary of State after the same date.

GREAT INDIAN PENINSULA RAILWAY SYSTEM—*contd.*

Great Indian Peninsula railway (5′ 6″ gauge)—*concld.*

Main provisions of contracts—*concld.*

Any surplus to be divided between the Government and the Company in the proportion of $\frac{19}{20}$ths to the former and $\frac{1}{20}$th to the latter. If the Company shall with the sanction of the Secretary of State increase its new capital and issue further shares or stock as fully paid up, the Company's share in such surplus as aforesaid shall thenceforth be increased by an additional fractional share bearing the same proportion to the original fractional share of $\frac{1}{20}$ as the additional capital of the Company shall bear to the authorised capital of £2,575,000, but so that the fractional share shall in no event exceed $\frac{1}{10}$.

(iv) *Rates and fares.*—Maximum and minimum rates and fares and classification of passengers and goods to be as authorised by the Government.

(v) *Special obligations as to the conveyance of*—

(*a*) Mails, troops, high Government officials, and Government stores.—To be conveyed on the same general conditions as those in force on State railways, and at rates to be approved by the Government (not being less than the rates in force for similar services on State railways of the same gauge).

(*b*) Government bullion and coin, and the persons in charge thereof.—At special rates to be approved by the Government.

(vi) *Power of the Government to determine contract*— } On the 30th June 1925 the Company are
(vii) *Power of the Company to surrender contract.*— } to give the Secretary of State possession of the undertaking, and the Secretary of State is to pay to the Company the amounts paid up, or credited as paid up, on all shares or stock then existing in the Company's new capital.

(viii) *Term of contract.*—25 years from 1st July 1900.

Statistics of working—(Those for the periods prior to 1901 will be found in Appendix 38 to the Railway Administration Report for 1907.)—

Year.	Mileage open at end of each year.	Total capital outlay, including suspense, to end of each year, *i.e.*, outlay on (i) lines open and (ii) lines partly or wholly under construction.	Gross earnings.	Net earnings.	Percentage of net earnings on total capital outlay given in column (3).	Interest.	Annuity.	Company's share of surplus profits (based on terms of contract) *attributable to each year.*	Gain or loss to the State *pertaining to each year.*	Earnings per mile per week.	Proportion of expenses to earnings.
1	2	3	4	5	6	7	8	9	10	11	12
	Miles.	Rs.	Rs.	Rs.		Rs.	Rs.	Rs.	Rs.	Rs.	
1901.	1,548·27	30,64,49,134	4,16,57,453	2,16,48,151	7·06	48,96,916	1,90,87,970	1,97,661*	—25,34,396	518	48·03
1902.	1,561·63	30,83,53,092	4,24,25,217	2,10,98,968	6·84	49,58,679	1,90,56,785	2,64,702	—31,81,198	523	50·19
1903.	1,561·63	31,08,53,055	4,68,61,534	2,38,12,514	7·66	50,67,701	1,90,28,730	3,79,633	—6,63,550	575	49·18
1904.	1,561·63	32,00,72,108	4,82,41,344	2,41,79,728	7·55	53,19,948	1,90,28,595	3,84,935	—5,53,750	592	49·88
1905.	1,561·63	32,65,20,022	5,22,33,877	2,70,20,162	8·28	57,50,859	1,90,28,535	5,28,413	+17,12,355	641	48·27
1906.	1,561·63	33,57,64,972	5,05,23,479	2,53,01,900	7·54	61,23,516	1,90,28,535	4,46,777	—2,96,928	623	49·92
1907	1,561·63	35,22,04,887	5,28,77,202	2,49,15,559	7·07	61,14,699	1,90,28,340	4,28,268	—6,55,748	649	52·88
1908.	1,599·41	37,36,87,900	4,68,32,792	1,76,86,213	4·73	68,53,220	1,90,28,340	64,298	—82,59,645	563	62·24
1909.	1,599·53	37,28,51,484	5,27,26,707	2,23,43,894	6·08	72,63,545	1,90,28,340	...	—39,47,991	634	57·62
1910.	1,606·24	38,67,82,534	5,88,44,731	2,58,06,771	6·67	74,48,102	1,90,28,355	4,60,763	—11,30,449	705	56·14
1911.	2,420·40	52,81,05,122	7,21,04,393	3,21,75,319	6·09	1,32,37,381	1,90,21,899	2,11,031	—2,94,992	573	55·38
1912.	2,419·33	54.83,41,956	8,02,93,465	3,69,34,275	6·74	1,33,36,641	1,90,27.104	6,30,327	+89,40,203	638	54·09
1st qr. 1913	2,418·41	55,97,86,972	2,35,95,346	1,07,43,557	1·92	34,21,681	47,56,635	3,08,487	+22,56,754	751	54·47
1913-14.	2,484·03	59,49,23,530	8,57,95,516	3,40,52,063	5·72	1,49,18,233	1,90,28,043	4,01,512	—2,95,725	664	60·31
1914-15.	2,499·64	62,57,62,657	7,71,55,244	2,86,15,825	4·57	1,35,09,055	1,42,26,985	63,799	+8,15,986	593	62·91
1915-16	2,554·35	65,18,54,816	9,04,19,770	3,87,73,463	4·95	1,71,15,055	1,90,27,710	5,20,228	+21,10,470	681	57·12
1916-17	2,551·71	65,77,23,935	9,74,13,433	4,50,10,038	6·84	1,70,48,950	1,90,27,680	7,94,697	+81,38,711	734	53·79
1917-18	2,553·13	66,55,45,487	10,61,08,431	4,94,99,571	7·44	1,76,88,694	1,90,27,665	10,02,459	+1,17,80,753	799	53·35

* From 1st July 1900 to 31st December 1901.

Agra-Delhi Chord railway (5′ 6″gauge)—

This railway has been constructed by the State and is worked by the Great Indian Peninsula Railway Company.

Progress in opening—

Sections of railway.	Date of opening.	Miles.	Total.	Grand total.
1	2	3	4	5
Main line—				
Raja-ki-Mandi (Agra) to Kosi	3-12-04	56·66		
Kosi to Delhi Sadr	15-11-04	62·62		
Delhi Sadr to Delhi	1-3-05	0·43		
Loop line connecting Agra-Delhi Chord railway with Delhi-Umballa-Kalka and Southern Punjab railways.	15-10-11	0·22	119·93	
Branch—				
Kosi to Sanket	24-2-06	5·95	5·95	
TOTAL	...	...	...	125·88
DOUBLE LINE—				
Junction point near Raja-ki-Mandi to centre of Bilochpura station.	3-2-13	0·65		
Loop line connecting Agra-Delhi Chord railway with Delhi-Umballa-Kalka and Southern Punjab railways	15-10-11	0·22		
Catch point No. 9 at Bombay end of Delhi Sadr Yard to terminal point of Agra-Delhi Chord railway.	0-0-12	1·91		
			2·78	

GREAT INDIAN PENINSULA RAILWAY SYSTEM—*contd.*

Agra-Delhi Chord railway (5′ 6″ gauge)—*concld.*

Details of construction—

Permanent-way.—The main line is laid with 85-lb. bull-headed steel rails on 45-lb. cast-iron chairs spiked with 3 spikes to deodar sleepers, and the branch is laid with 75-lb. flat-footed steel rails, second hand, on dog-spiked deodar sleepers.

Ballast.—The line is ballasted with kunkur soling and stone ballast to bring it up to full section.

Fencing.—The line is fully fenced.

Curves.—The sharpest curve is of 950 feet radius.

Gradients.—The ruling gradient is 1 in 400, except between Raja-ki-Mandi Junction and Bilochpura (Agra) and between Delhi Sadr and Delhi Junction where it is 1 in 200 and 1 in 333, respectively.

Contracts—

Dated the 21st December 1900 (called the principal contract), *between the Secretary of State and the Great Indian Peninsula Railway Company*, as to the maintenance, management and working, by the Company, as one undertaking, of the railways known as the Great Indian Peninsula railway system, and the Indian Midland railway system, and the subsidiary lines included therein.

Dated the 5th February 1909, *between the Secretary of State and the Great Indian Peninsula Railway Company*, as to the maintenance, management and working, by the Company, of the Agra-Delhi Chord railway as part of the Indian Midland railway system of the Company's undertaking.

Dated the 3rd July 1914 (supplemental to the contracts of 1900 and 1909), *between the Secretary of State and the Great Indian Peninsula Railway Company*, as to the adoption of the Government financial year for the preparation of Accounts.

Main provisions of contracts—

(i) *Land.*—Provided by the Government at the cost of capital.

(ii) *Government aid.*—The line is the absolute property of the Government, which provide all the funds chargeable to capital, and it is managed, maintained and worked by the Great Indian Peninsula Railway Company as part of the Indian Midland Railway system of the Company's undertaking.

(iii) *Terms of working.*—The line is worked for the same proportion of the total working expenses of the undertaking, including this railway, as the gross earnings of this railway bear to the gross earnings of the whole undertaking, provided that no proportion in excess of 20 per cent of the gross receipts paid to any Railway Administration to whom running powers may be granted over the Agra-Delhi Chord is debited in the General Working Expenses Account of the Company's undertaking, such excess, if any, being directly debited to the Revenue Account of the Agra-Delhi Chord railway as a separate charge against its receipts.

(iv) *Distribution of profits.*—The whole of the net earnings of the railway belong to the Government.

(v) *Rates and fares.*—
(vi) *Special obligations as to the conveyance of.*—
(a) Mails, troops, police, high Government officials and Government stores.—
(b) Government bullion and coin, and the persons in charge thereof.—
} As noted under the Great Indian Peninsula railway.

(vii) *Power of the Government to determine contract.*—
(viii) *Power of the Company to surrender contract.*—
(ix) *Term of contract.*—
} The contract is current from the day on which the line was opened throughout for traffic and is to continue in force until terminated, either by the Government or the Company, on the 30th September or 31st March by giving to the other party not less than twelve calendar months' notice.

Statistics of working—

Year.	Mileage open at end of each year.	Total capital outlay, including suspense, to end of each year, *i.e.*, outlay on (i) lines open and (ii) lines partly or wholly under construction.	Gross earnings.	Net earnings.	Percentage of net earnings on total capital outlay given in column (3).	Interest.	Gain or loss to the State *pertaining to each year.*	Earnings per mile per week.	Proportion of expenses to earnings.
1	2	3	4	5	6	7	8	9	10
	Miles.	Rs.	Rs.	Rs.		Rs.	Rs.	Rs.	
1904 .	119·51	1,05,90,556	18,070	9,992	0·09	2,95,164	—2,85,172	22	44·70
1905 .	119·75	1,22,46,927	8,04,655	4,19,625	3·43	4,20,181	—556	140	47·85
1906 .	125·99	1,27,90,307	16,46,320	8,15,363	6·37	4,70 283	+3,45,080	254	50·47
1907 .	125·99	1,28,37,017	16,15,900	7,45,489	5·81	4,09,625	+3,35,864	247	53·87
1908 .	125·66	1,28,12,755	15,17,793	5,70,112	4·45	4,34,834	+1,35,278	232	62·44
1909 .	125·66	1,30,68,563	14,74,866	6,22,196	4·76	4,35,293	+1,86,903	226	57·81
1910 .	125·66	1,34 32,595	17,65,732	7,52,601	5·60	4,45,949	+3,06,652	270	57·38
1911 .	125·90	1,42,05,868	20,67,879	8,63,294	6·08	4,67,506	+3,95,788	316	58·25
1912 .	125·88	1,43,40,719	22,83,807	10,48,792	7·31	4,88,760	+5,60,032	349	54·58
1st qr. of 1913.	125·88	1,44,67,320	6,14,952	2,80,382	1·94	1,22,470	+1,57,912	376	54·41
1913-14 .	125·88	1,45,94,620	23,09,274	9,21,034	6·31	5,08,329	+4,12,705	353	60·12
1914-15 .	125·88	1,47,46,965	32,06,644	12,01,747	8·15	5,13,360	+6,88,387	490	62·52
1915-16 .	125·88	1,47,56,191	28,84 018	12,39,144	8·40	5,12,249	+7,26,895	440	57 02
1916-17 .	125·88	1,47,96,695	30,47,574	14,10,278	9·53	4,87,091	+9,23,187	466	53·72
1917-18 .	125 88	1,48,68,032	33,67,179	15,74,669	10·59	5 15,128	+10,59,541	514	35·23

GREAT INDIAN PENINSULA RAILWAY SYSTEM—*contd.*

Baran-Kotah railway (5′ 6″ gauge)—

Progress in opening—

Sections of railway.	Date of opening.	Miles.	Total.
1	2	3	4
Baran to Antah	20-2-07	13·58	
Antah to Kotah	1-5-09	26·71	
TOTAL	...		40·29

Details of construction—

Permanent-way.—The permanent-way consists of 87-lb. flat-footed steel rails and Australian or sâl sleepers.
Ballast.—The ballast consists of broken stone.
Fencing.—The line is not fenced.
Curves.—The sharpest curve is of 1,809 feet radius.
Gradients.—The ruling gradient is 1 in 150.

Contracts—

Dated the 21st December 1900 (called the principal contract), *between the Secretary of State and the Great Indian Peninsula Railway Company,* as to the maintenance, management and working, by the Company, as one undertaking, of the railways known as the Great Indian Peninsula railway system and the Indian Midland railway system, and the subsidiary lines included therein.

Dated the 19th March 1909, *between the Secretary of State and the Great Indian Peninsula Railway Company,* as to the maintenance, management and working, by the Company, of the Baran-Kotah railway as part of the Indian Midland railway system of the Company's undertaking.

Dated the 3rd July 1914 (supplemental to the contracts of 1900 and 1909), *between the Secretary of State and the Great Indian Peninsula Railway Company,* as to the adoption of the Government financial year for the preparation of Accounts.

Main provisions of contracts—

As noted under Agra-Delhi Chord railway (5′ 6″ gauge), except that the charge for working expenses is not in any half-year to exceed 50 per cent of the entire gross receipts of the Baran-Kotah railway. (*Note.*—These terms had effect from the 1st July 1909, the date on which the Baran-Kotah railway was handed over to the Great Indian Peninsula Railway Company for working, *vide* Railway Board's letter to the Engineer-in-Chief, Nagda-Muttra railway, No. 1022-R.T., dated the 7th June 1909. Prior to that date the charge was the same percentage as obtained for working the lines comprised in the Great Indian Peninsula railway undertaking, *vide* letter from the Agent, Great Indian Peninsula railway to the Secretary, Railway Board, No. 57-H.-5, dated the 15th April 1912.)

Statistics of working—

Year.	Mileage open at end of each year.	Total capital outlay, including suspense, to end of each year, i.e., outlay on (i) lines open and (ii) lines partly or wholly under construction.	Gross earnings.	Net earnings.	Percentage of net earnings on total capital outlay given in column (3).	Interest.	Gain or loss to the State *pertaining to each year.*	Earnings per mile per week.	Proportion of expenses to earnings.
1	2	3	4	5	6	7	8	9	10
	Miles.	Rs.	Rs.	Rs.		Rs.	Rs.	Rs.	
1908 .	13·58	39,38,972	3,536	1,582	0·04	1,29,811	—1,28,229	10	55·26
1909 .	40·29	45,52,438	48,152	23,181	0·51	1,49,921	—1,26,740	23	51·86
1910 .	40·29	45,67,295	1,03,829	52,720	1·15	1,51,068	—98,348	50	49·22
1911 .	40·29	45,65,880	1,58,809	79,405	1·74	1,54,829	—75,424	76	50·00
1912 .	40·29	45,96,797	1,90,009	97,188	2·11	1,57,421	—60,233	91	48·85
1st qr. of 1913.	40·29	46,47,772	38,608	19,334	0·42	39,301	—19,967	74	50·00
1913-14 .	40·29	46,47,772	1,77,507	88,754	1·91	1,62,688	—73,934	85	50·00
1914-15 .	40·29	46,47,772	1,49,969	75,669	1·63	1,62,635	—86,966	72	49·54
1915-16 .	40·29	46,47,772	2,21,240	1,10,620	2·38	1,61,394	—50,774	106	50·00
1916-17 .	40·29	47,42,696	2,43,097	1,21,548	2·56	1,54,774	—33,226	116	50·00
1917-18 .	40·29	49,16,727	1,61,978	80,989	1·65	1,67,736	—86,747	77	50·00

Bhopal-Itarsi railway (5′ 6″ gauge)—

Progress in opening—

Sections of railway.	Date of opening.	Miles.	Total.	Grand total.
1	2	3	4	5
Main line—				
Itarsi to Hoshangabad	1-6-82	10·89		
Hoshangabad to Bhopal	1-11-84	45·45		
			56·34	
Branch—				
Centre of Bhopal station to the joint boundary of the Bhopal-Itarsi and Indian Midland railways at Bhopal	11-11-95	0·88		
			0·88	
TOTAL	...	...	...	57·22

GREAT INDIAN PENINSULA RAILWAY SYSTEM—*contd.*

Bhopal Itarsi railway (5′ 6″ gauge)—*contd.*

Details of construction—

Permanent-way.—The line is laid with the Indian Midland railway 80-lb. flat-footed steel rails on Indian Midland railway cast-iron pot sleepers.

Ballast.—The line is fully ballasted throughout with broken stone.

Fencing.—The line is fenced throughout.

Curves.—There are no curves with a radius of less than 990 feet.

Gradients.—The ruling gradient is 1 in 200, except on the Ghat section, 11 miles, where it is 1 in 80.

Agreements and contract—

Agreement, dated the 16th September 1880, *between the Government of India and Her Highness the Begum of Bhopal,* as to the construction, management, maintenance and working, by the Government, of the Bhopal-Itarsi railway.

Agreement, dated the 30th June 1887, *between the Government of India and Her Highness the Begum of Bhopal,* supplemental to, and modifying, the agreement of 1880.

Agreement, dated the 2nd December 1890, *between the Government of India and Her Highness the Begum of Bhopal,* supplemental to, and further modifying, the agreement of 1880.

Contract, dated the 21st December 1900 (called the principal contract), *between the Secretary of State and the Great Indian Peninsula Railway Company,* as to the maintenance, management and working, by the Company, of the railways known as the Great Indian Peninsula railway system and the Indian Midland railway system, and the subsidiary lines included therein.

Main provisions of agreements and contract—

(i) *Land.*—Land within the Bhopal State was provided free of cost by the Durbar; that within British territory by the Government at the cost of capital.

(ii) *Government aid.*—The Government paid for the portion of the line in British territory, and a moiety of the cost of the bridge over the Nerbudda river; in all about Rupees 13,00,000: the Begum of Bhopal contributed Rupees 50,00,000 for the portion of the line in her dominions.

All additional capital is to be provided by the Government, which undertook to construct, maintain, manage and work the line by State or other agency. At present the line is worked by the Great Indian Peninsula Railway Company as part of its undertaking.

(iii) *Terms of working.*—For working and stocking the Bhopal-Itarsi railway the Great Indian Peninsula Railway Company receives a sum which bears the same proportion to the total working expenses of the Company's undertaking, including the Bhopal-Itarsi railway, as the gross earnings of the Bhopal-Itarsi railway bear to the gross earnings of the undertaking.

(iv) *Distribution of profits.*—The net earnings are divided in perpetuity between the Government and the Ruler of Bhopal in proportion to the capital contributed by each. In the event of the railway being worked at a loss, such loss is borne by the two parties in the same proportion.

(v) *Rates and fares.*—

(vi) *Special obligations as to the conveyance of.*—

(*a*) Mails, troops, police, high Government officials and Government stores.—

(*b*) Government bullion and coin, and the persons in charge thereof.—

(vii) *Power of the Government to determine contract.*—

(viii) *Power of the Company to surrender contract.*—

(ix) *Term of contract.*—

} As noted under the Great Indian Peninsula Railway.

GREAT INDIAN PENINSULA RAILWAY SYSTEM—*contd.*

Bhopal-Itarsi railway (5′ 6″ gauge)—*concld.*

Statistics of working (Those for the periods prior to 1889 will be found in Appendix 38 to the Railway Administration Report for 1907).—

Year.	Bhopal-Itarsi (British section).									Bhopal-Itarsi (Native State section).						
	Mileage open at end of each year.	Total capital outlay, including suspense, to end of each year, *i.e.*, outlay on (i) lines open, and (ii) lines partly or wholly under construction.	Gross earnings.	Net earnings.	Percentage of net earnings on total capital outlay given in column (3).	Interest.	Gain or loss to the State *pertaining to each year.*	Earnings per mile per week.	Proportion of expenses to earnings.	Mileage open at end of each year.	Total capital outlay, including suspense, to end of each year, *i.e.*, outlay on (i) lines open, and (ii) lines partly or wholly under construction.	Gross earnings.	Net earnings.	Percentage of net earnings on total capital outlay given in column (12).	Earnings per mile per week.	Proportion of expenses to earnings.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
	Miles.	Rs.	Rs.	Rs.		Rs.	Rs.	Rs.		Miles.	Rs.	Rs.	Rs.		Rs.	
1889.	13·00	12,50,000	79,163	−5,422	...	50,000	−55,422	117	106·85	44·11	48,40,846	2,67,936	−18,351	...	117	106·85
1890.	13·00	12,85,077	87,765	−16,572	...	50,351	−66,923	130	118·88	44·11	50,00,000	2,97,049	−56,093	...	130	118·88
1891.	13·00	15,13,568	1,30,884	48,607	3·21	57,713	− 9,106	200	62·50	44·11	50,00,000	4,60,431	1,73,154	3·46	199	62·50
1892.	13·00	17,46,208	1,53,099	56,397	3·23	69,131	−12,734	226	63·16	44·11	50,00,000	4,47,797	1,65,883	3·32	195	62·96
1893.	13·11	20,25,053	1,69,162	52,038	2·57	78,429	−26,391	248	69·17	44·00	50,00,000	4,24,236	1,30,925	2·62	185	69·17
1894.	13·11	21,71,496	1,61,638	61,455	2·83	83,509	−22,054	237	61·98	44·00	50,00,000	3,80,217	1,44,607	2·89	166	61·97
1895.	13·11	22,47,963	1,42,658	46,114	2·05	89,323	−43,209	209	67·68	44·28	50,00,000	3,18,074	1,02,821	2·06	138	67·67
1896	13·11	22,71,877	1,63,688	62,744	2·76	90,107	−27,363	241	61·75	44·28	50,00,000	3,61,363	1,38,532	2·77	157	61·63
1897.	13·11	22,97,134	1,52,215	61,135	2·66	91,805	−30,670	223	59·84	44·28	50,00,000	3,31,379	1,33,096	2·66	144	59·84
1898.	13.11	23,24,365	1,93,364	79,435	3·42	92,477	−13,042	284	58·81	44·28	50,00,000	4,17,019	1,71,375	3·43	181	58·90
1899.	13.11	23,61,938	2,09,611	84,080	3·56	93,303	− 9,223	307	59·89	44.28	50,00,000	4,47,225	1,79,444	3·59	194	59·88
1900.	13·11	23,87,339	2,55,120	1,27,332	5·33	95,293	+32,039	375	50·12	44·28	50,00,000	5,35,369	2,67,283	5·35	234	50·06
1901.	13·11	25,46,891	2,92,861	1,44,235	5·66	98,989	+45,246	430	50·75	44·28	50,00,000	5,85,152	2,88,838	5·78	254	50·64
1902.	13·11	28,02,330	3,46,103	1,71,236	6·11	1,06,632	+64,604	508	51·51	44·28	50,00,000	6,37,038	3,16,683	6·33	278	49·74
1903.	13·11	30,92,697	3,77,177	1,91,441	6·19	1,17,285	+74,156	553	49·48	44·28	50,00,000	6,31,911	3,21,328	6·43	276	48·84
1904.	13·11	31,52,907	3,95,734	1,98,066	6·28	1,20,127	+77,939	583	50·14	44·28	50,00,000	6,43,742	3,22,374	6·45	279	49·81
1905.	13·11	31,76,934	3,25,637	1,67,305	5·27	1,23,241	+44,064	477	48·57	44·28	50,00,000	5,21,619	2,67,959	5·36	227	48·63
1906.	13·11	32,57,841	3,60,294	1,78,761	5·49	1,25,079	+53,682	531	50·37	44·28	50,00,000	5,66,833	2,81,376	5·63	246	50·36
1907.	13·11	33,98,742	4,83,589	2,27,071	6·68	1,04,145	+1,22,926	710	53·04	44·28	50,00,000	7,32,284	3,44,438	6·88	318	52·96
1908.	13·11	35,34,132	4,29,276	1,62,302	4·59	1,19,624	+42,678	630	62·19	44·28	50,00,000	6,11,033	2,31,222	4·62	265	62·16
1909.	13·11	36,27,495	4,68,717	1,98,456	5·47	1,20,102	+78,354	688	57·66	44·28	50,00,000	6,50,553	2,75,516	5·51	283	57·65
1910.	13·11	37,52,643	5,70,169	2,47,995	6·61	1,23,711	+1,24,284	836	56·50	44·28	50,00,000	7,66,302	3,33,839	6·68	333	56·44
1911.	12·13	38,28,934	5,58,428	2,50,159	6·53	1,28,262	+1,55,518	885	55·20	44 49	50,00 000	7,34,374	3,29.072	6·58	317	55·19
1912.	12·13	39,14,773	7,09,910	3,18,267	8·13	1,32,749	+1,31,897	1,124	55·11	44·49	50,00,000	9,09,768	4,08,687	8·17	393	55·08
1st qr of 1913	12 13	39,41,321	2,12,459	96,869	2·46	33,398	+ 63,471	1,347	54·41	44·49	50,00,000	2,69,528	1,22,889	2·46	466	54·41
1913-14	12·13	40,23,467	7,05,997	2,78,970	6·93	1,38,967	+1,40,003	1,119	60·49	44·49	50,00,000	8,82,535	3,48,636	6·97	381	60·50
1914-15	12·13	40,69,706	5,38,468	2,01,763	4·96	1,41,598	+ 60,165	851	62·53	44·49	50,00,000	6,62,101	2,48,000	4·96	286	62·54
1915-16	12·13	40,84,392	6,58,689	2,80,302	6·86	1,41,576	+1,38,726	1,044	57·45	44·49	50,00,000	8,06,984	3,43,352	6 87	349	57·45
1916 17	12·02	40,94,551	7,87,907	3,65,281	8·92	1,34,805	+2,30,476	1,261	53·64	44 35	50,00,000	9,62 624	4,46 266	8 93	416	53·64
1917 18	12·66	40,95,197	9,94,950	4,65,293	11·36	1,42,215	+3,23,078	1,511	53·23	44·56	50,00,000	12,15,053	5,68,227	11·36	524	53·23

Bhopal-Ujjain railway (5′ 6″ gauge)—

Progress in opening—

Section of railway.	Date of opening.	Miles.	Total.
1	2	3	4
Bhopal to Ujjain	11-11-95	113·28	113·28

Details of construction—

Permanent-way.—The permeanent-way consists of 75-lb. flat-footed steel rails on transverse steel sleepers.

Ballast.—The line is fully ballasted throughout with broken stone.

Fencing.—The line is fenced only at, and in the vicinity of, stations, towns and important level crossings.

Curves.—There are no curves with a radius of less than 990 feet.

Gradients.—The ruling gradient is 1 in 150.

GREAT INDIAN PENINSULA RAILWAY SYSTEM—*contd.*

Bhopal-Ujjain railway (5′ 6″ gauge)—*contd.*

Agreements and contract—

Agreement, dated the 4th August 1896 (called the principal contract), *between the Government of Her Highness the Begum of Bhopal and the Indian Midland Railway Company,* as to the maintenance, management and working, by the Company, of the Bhopal-Parbati section of the Bhopal-Ujjain railway as part of the Company's undertaking.

Agreement, dated the 4th August 1896 (called the principal contract), *between the Government of His Highness the Maharaja Scindia of Gwalior and the Indian Midland Railway Company,* as to the maintenance, management and working, by the Company, of the Parbati-Ujjain section of the Bhopal-Ujjain railway as part of the Company's undertaking.

Contract, dated the 21st December 1900, *between the Secretary of State and the Great Indian Peninsula Railway Company,* as to the maintenance, management and working, by the Company, of the railways known as the Great Indian Peninsula railway system and the Indian Midland railway system, and the subsidiary lines included therein.

Memorandum No. 2653-I. B., dated the 1st July 1902, *from the Government of India in the Foreign Department, to the Government of India in the Public Works Department,* intimating the acceptance by Her Highness the Begum of Bhopal of the provisions of clauses 28 and 29 of the contract of the 21st December 1900, *between the Secretary of State and the Great Indian Peninsula Railway Company,* in lieu of those of clause 15 of the agreement of the 4th August 1896, *between Her Highness' Government and the Indian Midland Railway Company,* as to the method of arriving at the working expenses of the Bhopal-Parbati section of the Bhopal-Ujjain railway.

Agreement, dated the 31st January 1911 (supplemental to the agreement of 1896), *between the Secretary of State and the Government of Her Highness the Begum of Bhopal,* as to the substitution of "Secretary of State," for "Indian Midland Railway Company," as a party to the agreement of 1896.

Agreement, dated the 20th March 1911 (supplemental to the agreement of 1896), *between the Secretary of State and the Government of His Highness the Maharaja Scindia of Gwalior,* as to the substitution of "Secretary of State," for "Indian Midland Railway Company," as a party to the agreement of 1896.

Main provisions of agreements and contract—

(i) *Land.*—Provided free of cost by the Bhopal and Gwalior Durbars for the portions of the railway in their respective territories.

(ii) *Government aid.*—The Bhopal-Parbati section is owned by the Bhopal Durbar, and the Parbati-Ujjain section by the Gwalior Durbar, each of which provides the funds for additional works, alterations in existing works not of the nature of repairs, and expenses other than those due to ordinary wear and tear incidental to the use and working of the railway and works and the conveyance of traffic thereon. The line is managed, maintained, stocked and worked by the Great Indian Peninsula Railway Company as part of the Indian Midland Railway system of the Company's undertaking.

(iii) *Terms of working.*—For the Bhopal-Parbati section the charges against its gross receipts for working are as noted under Great Indian Peninsula railway (5′ 6″ gauge).

For working th
50 per cent of its
charged with rent
Baroda and Centr
lines and instrume

(iv) *Distribution of profits*
Durbar; and thos

(v) *Rates and fares.*—
(vi) *Special obligations as*
(*a*) Mails, troops, po
officials and G
(*b*) Government bull
persons in ch

(vii) *Power of the Governm*
(viii) *Powers of the Durbar*
from the dates of
12 months' notice
in any year.

(ix) *Term of agreements*
railway, whichev
throughout for all

GREAT INDIAN PENINSULA RAILWAY SYSTEM—*contd.*

Bhopal-Ujjain railway (5′ 6″ gauge)—*concld.*

Statistics of working (Those for the periods prior to 1908 will be found in Appendix 38 to the Railway Administration Report for 1907.)—

Year.	Mileage open at end of each year.	Total capital outlay, including suspense, to end of each year, *i.e.*, outlay on (i) lines open and (ii) lines partly or wholly under construction.	Gross earnings.	Net earnings.	Percentage of net earnings on total capital outlay given in column (3).	Earnings per mile per week.	Proportion of expenses to earnings.
1	2	3	4	5	6	7	8
	Miles.	Rs.	Rs.	Rs.		Rs.	
1908 .	113·27	78,62,989	7,70,325	3,45,421	4·39	131	55·16
1909 .	113·27	78,72,658	8,23,957	3,82,457	4·86	148	53·58
1910 .	113·27	78,73,354	8,65,310	4,05,340	5·15	147	53·16
1911 .	113·27	78,77,088	9,59,356	4,55,954	5·79	163	52·47
1912 .	113·27	78,78,601	10,76,999	5,17,442	6·57	183	51·96
1st qr. of 1913.	113·27	78,79,281	2,47,615	1,17,202	1·49	168	52·67
1913-14	113·27	78,82,524	11,10,645	5,12,648	6·50	189	53·84
1914-15	113·27	78,79,430	9,76,407	4,27,881	5·43	166	56·18
1915-16	113·27	78,82,465	10,77,534	5,04,090	6·39	183	53·22
1916-17	113·35	78,87,205	12,49,263	6,01,113	7·62	212	51·88
1917-18	113·28	79,00,130	8,92,619	4,26,889	5·40	152	52·17

Bina-Goona-Baran railway (5′ 6″ gauge)—

Progress in opening—

Sections of railway.	Date of opening.	Miles.	Total.
1	2	3	4
From a point 32 D at mile 606·457 at Bina to junction with Bina Goona Baran railway at mile 607·916.	...	1·46	...
From the joint boundary of the Midland section of the Great Indian Peninsula and Bina-Goona-Baran railways, a point, 2·00 miles from the centre of Bina station, to Goona.	23-9-95	71·71	
From centre of Goona station (mile 216—3,402 feet) to end of Baran station (mile 290—2,850 feet).	15-5-99	73·90	
TOTAL ...	...	...	147·07

Details of construction—

Permanent-way.—The line is laid with 75-lb. flat-footed steel rails, 59·90 miles on deodar sleepers and 85·73 miles on transverse steel sleepers, State railway pattern and 1·44 miles are laid with 80-lb. track on Indian Midland railway cast iron pots.

Ballast.—The line is ballasted with broken stone and laterite.

Fencing.—The line from Bina to Goona is fenced. The Goona-Baran section is unfenced except at stations.

Curves.—There are no curves with a radius of less than 990 feet.

Gradients.—The ruling gradient is 1 in 125.

Agreements and contract—

Agreement, dated the 15th July 1896 (called the principal contract), *between the Government of His Highness the Maharaja Scindia of Gwalior and the Indian Midland Railway Company*, as to the maintenance, management and working, by the Company, of the Bina-Goona section of the Bina-Goona-Baran railway as part of the Company's undertaking (with clause 13 thereof modified as to *maintenance of telegraphs* under the authority of the letter *from the Government of India to the Honourable the Agent to the Governor General for Central India*, No. 596 R. T., dated the 20th June 1899).

Agreement, dated the 20th February 1899 (called the principal contract), *between the Government of His Highness the Maharao of Kotah and the Indian Midland Railway Company*, as to the maintenance, management and working, by the Company, of the Chabra-Baran section of the Bina-Goona-Baran railway as part of the Company's undertaking.

Agreement, dated the 27th February 1899 (called the principal contract), *between the Government of His Highness the Nawab of Tonk and the Indian Midland Railway Company*, as to the management, maintenance and working, by the Company, of the Dharnaoda-Chabra section of the Bina-Goona-Baran railway as part of the Company's undertaking.

Agreement, dated the 12th May 1899 (called the principal contract), *between the Government of His Highness the Maharaja Scindia of Gwalior and the Indian Midland Railway Company*, as to the maintenance, management and working, by the Company, of the Goona-Dharnaoda section of the Bina-Goona-Baran railway as part of the Company's undertaking.

Contract, dated the 21st December 1900, *between the Secretary of State and the Great Indian Peninsula Railway Company*, as to the maintenance, management and working, by the Company, of the railways known as the Great Indian Peninsula railway system and the Indian Midland railway system, and the subsidiary lines included therein.

GREAT INDIAN PENINSULA RAILWAY SYSTEM—*contd.*

Bina-Goona-Baran railway (5′ 6″ gauge)—*contd.*

Agreements and contract—*concld.*

Memorandum No. 3529 I. B., dated the 20th September 1901, *from the Government of India in the Foreign Department, to the Government of India in the Public Works Department,* intimating the acceptance by the Kotah and Tonk Durbars of the provisions of clauses 28 and 29 of the contract of the 21st December 1900, *between the Secretary of State and the Great Indian Peninsula Railway Company,* in lieu of those of the contracts of the 20th and 27th February 1899, *between the Kotah and Tonk Durbars and the Indian Midland Railway Company,* as to the method of arriving at the working expenses, respectively, of the Chabra-Baran and Dharnaoda-Chabra sections of the Bina-Goona-Baran railway.

Agreements, dated the $\frac{\text{16th March}}{\text{17th April}}$ $\frac{}{\text{29th June}}$ 1905, *between the Government of His Highness the Maharaja Scindia of Gwalior and the Government of His Highness the Nawab of Tonk,* as to the purchase, by the former from the latter, of the Dharnaoda-Chabra section of the Bina-Goona-Baran railway.

Agreement, dated the 12th January 1911, *between the Secretary of State and the Government of His Highness the Maharao of Kotah,* supplemental to the agreement of the 20th February 1899, *between the Kotah Durbar and the Indian Midland Railway Company,* as to the substitution of "Secretary of State", for "Indian Midland Railway Company", as a party to the agreement of 1899.

Agreement, dated the 20th March 1911, *between the Secretary of State and the Government of His Highness the Maharaja Scindia of Gwalior,* supplemental to the agreement of the 15th July 1896, *between the Gwalior Durbar and the Indian Midland Railway Company,* as to the substitution of "Secretary of State", for "Indian Midland Railway Company", as a party to the agreement of July 1896.

Agreement, dated the 20th March 1911, *between the Secretary of State and the Government of His Highness the Maharaja Scindia of Gwalior,* supplemental to the agreement of the 12th May 1899 *between the Gwalior Durbar and the Indian Midland Railway Company,* as to the substitution of "Secretary of State," for "Indian Midland Railway Company", as a party to the agreement of 1899.

Agreement, dated the 20th March 1911, *between the Secretary of State and the Government of His Highness the Maharaja Scindia of Gwalior,* supplemental to the agreement of the 27th February 1899, *between the Tonk Durbar and the Indian Midland Railway Company,* as to the substitution of "Secretary of State", for "Indian Midland Railway Company", as a party to the agreement of 1899.

Memorandum No. 3002-I.B., dated the 30th August 1913, *from the Government of India in the Foreign Department, to the Government of India in the Railway Department,* intimating the acceptance by the Gwalior Durbar of the arrangement come to between the Tonk Durbar and the Great Indian Peninsula Railway Company in 1901, for the purpose of arriving at the working expenses of the Dharnaoda-Chabra section of the Bina-Goona-Baran railway.

Corrigendum to the agreement of 20th February 1899, as to the method of calculating the working expenses of the Chabra-Baran section with effect from 1st October 1917.

Main provisions of agreements and contract—

(i) *Land.*—Provided free of cost by the several Native States for the portions of the railway in their respective territories.

(ii) *Government aid.*—The Bina-Goona, Goona-Dharnaoda, and Dharnaoda-Chabra sections are owned by the Gwalior Durbar, and the Chabra-Baran section by the Kotah Durbar, each of which provides funds for additional works, alterations in existing works not of the nature of repairs, and expenses other than those due to ordinary wear and tear and incidental to the use and working of the railway and works and the conveyance of traffic thereon. The railway is managed, maintained, stocked and worked by the Great Indian Peninsula Railway Company as part of the Indian Midland railway system of the Company's undertaking.

(iii) *Terms of working.*—For working the Bina-Goona section, the Great Indian Peninsula Railway Company retains 50 per cent of its gross receipts for each half-year. The gross receipts of the section are also charged with rent for works, etc., in sole and joint use at Bina junction as laid down in clause 10 of the agreement of the 15th July 1896, and with rent for telegraph lines and instruments when not the property of the railway.

For working the Goona-Dharnaoda section, the Great Indian Peninsula Railway Company retains out of its gross receipts a sum which bears the same proportion to the entire gross receipts of the section as the aggregate working expenses of the Indian Midland railway system as a whole (including the Goona-Dharnaoda section) bear to the gross receipts of that system, for each half-year, subject to a limit of 50 per cent of the gross earnings of the section.

For the Dharnaoda-Chabra section the Railway Company charges the same percentage of the entire gross receipts of that section as the aggregate working expenses of the whole system of the Company bear to the gross receipts of that system.

For working the Chabra-Baran section the Great Indian Peninsula Railway Company retains out of its gross receipts a sum which bears the same proportion to the entire gross receipts of the section as the aggregate working expenses of the whole system of the Company bear to the gross receipts of that system, for each half year, subject to a limit of 50 per cent of the gross earnings of the section.

(iv) *Distribution of profits.*—The net receipts of each section are paid over to the Durbar to which such section belongs.

GREAT INDIAN PENINSULA RAILWAY SYSTEM—*contd.*

Bina-Goona-Baran railway (5′ 6″ gauge)—*concld.*

Main provisions of agreements and contract.—*concld.*

(v) *Rates and fares.*—
(vi) *Special obligations as to the conveyance of.*—
(a) Mails, troops, police, high Government officials and Government stores.—
(b) Government bullion and coin, and the persons in charge thereof—
} As noted under Great Indian Peninsula railway.

(vii) *Power of the Government to determine agreements.*—
(viii) *Power of the Durbars to determine agreements.*—
(ix) *Term of agreements.*—
} As noted under Bhopal-Ujjain railway, except in the case of Chabra-Baran section where the Agreement, dated the 20th February 1899, is terminable on the 31st March or 30th September in any year on 12 months' notice being given in writing by either party to the other.

Statistics of working (Those for the periods prior to 1908 will be found in Appendix 38 to the Railway Administration Report for 1907.)—

Year.	Mileage open at end of each year.	Total capital outlay, including suspense, to end of each year, *i.e.*, outlay on (*i*) lines open and (*ii*) lines partly or wholly under construction.	Gross earnings.	Net earnings.	Percentage of net earnings on total capital outlay given in column (3).	Earnings per mile per week.	Proportion of expenses to earnings.
1	2	3	4	5	6	7	8
	Miles.	Rs.	Rs.	Rs.		Rs.	
1908	145·63	99,96,263	4,13,370	1,88,397	1·88	55	54·42
1909	145·63	1,00,08,750	2,79,897	1,27,960	1·28	37	54·28
1910	145·61	1,00,13,493	3,28,511	1,53,287	1·53	43	53·34
1911	145·61	1,00,32,562	3,87,036	1,81,472	1·81	51	53·11
1912	145·61	1,00,34,004	5,24,546	2,50,969	2·50	69	52·16
1st qr. of 1913	145·61	1,00,34,292	1,56,630	75,070	0·75	83	52·07
1913-14	145·61		6,13,716	2,85,378	2·84	81	53·50
1914-15	145·61	1,00,50,037	4,46,962	1,92,056	1·91	59	57·03
1915-16	145·61	1,00,52,443	5,41,654	2,51,780	2·50	72	53·52
1916-17	145·61	1,00,53,452	5,76,179	2,72,316	2·71	76	52·74
1917-18	147·07	1,00,53,795	4,62,319	2,20,979	2·20	60	52·20

Cawnpore-Banda railway (5′ 6″ gauge)—

This line was constructed and worked as a State line by the Oudh and Rohilkhand railway up to the 31st March 1915. Since then the maintenance, management and working of the line have been taken over by the Great Indian Peninsula Railway Company.

Progress in opening—

Sections of railway.	Date of opening	Miles.	Total.
1	2	3	4
Juhi to Hamirpur Road	21-4-13	32·87	
Hamirpur Road to Khirada	20-7-14	42·84	
TOTAL ...	...	...	75·71

Details of construction—

Permanent-way.—The permanent-way consists of 75-lb. flat-footed British standard rails laid on steel trough sleepers.

Ballast.—The line is ballasted with sand. But stone or brick ballast has been provided at station yards and bridge approaches.

Fencing.—The line is fenced throughout.

Curves.—The sharpest curve has a radius of 2,292 feet.

Gradients.—The ruling gradient is 1 in 150.

Contracts—

Dated the 21st December 1900 (called the principal contract), *between the Secretary of State and the Great Indian Peninsula Railway Company*, as to the maintenance, management and working, by the Company, as one undertaking, of the railways known as the Great Indian Peninsula railway system and the Indian Midland railway system, and the subsidiary lines included therein.

Dated the 8th May 1914, *between the Secretary of State and the Great Indian Peninsula Railway Company*, as to the maintenance, management and working, by the Company, of the Cawnpore-Banda railway, with effect from the 1st April 1915, as part of the Indian Midland railway system of the Company's undertaking.

Main provisions of contracts—

As noted under Agra-Delhi Chord railway, except that the rolling-stock for the Cawnpore-Banda railway will be supplied by the Great Indian Peninsula railway in return for a payment of 5 per cent of the gross earnings of the Cawnpore-Banda railway, over and above the percentage paid by the Secretary of State, for the maintenance and working of that line. (India office letter No. 26 Railway, dated the 30th April 1915).

GREAT INDIAN PENINSULA RAILWAY SYSTEM—*contd.*

Cawnpore-Banda railway (5′ 6″ gauge)—*concld.*

Statistics of working—

Year.	Mileage open at end of each year.	Total capital outlay, including suspense, to end of each year, *i.e.*, outlay on (*i*) lines open and (*ii*) lines partly or wholly under construction.	Gross earnings.	Net earnings.	Percentage of net earnings on total capital outlay given in column (3).	Interest.	Gain or loss to the State *pertaining to each year.*	Earnings per mile per week.	Proportion of expenses to earnings.
1	2	3	4	5	6	7	8	9	10
	Miles.	Rs.	Rs.	Rs.		Rs.	Rs.	Rs.	
1913-14 .	33·37	69,34,118	Included with the Oudh and Rohilkhand railway.						
1914-15 .	76·27	78,34,564							
1915-16 .	75·71	78,91,973	4,05,258	1,60,136	2·03	2,72,926	—1,12,790	103	60·48
1916-17 .	75·71	79,21,177	3,68,286	1,50,691	1·90	2,60,632	—1,09,94 1	94	59·08
1917-18 .	75·71	79,89,027	3,08,939	1,29,184	1·62	2,76,281	—1,47,097	78	58·18

Dhond-Baramati railway (2′ 6″ gauge)—

Date of registration of the Company.—1912.

Progress in opening—

Section of railway.	Date of opening.	Miles.	Total.
1	2	3	4
Dhond to Baramati	20-5-14	27·26	27·26

Details of construction—

Permanent-way.—The permanent-way consists of 35-lb. flat-footed steel rails laid on pressed steel pea-pod sleepers.

Ballast.—The line is ballasted with stone and the banks with moorum.

Fencing.—Only the station yards are fenced.

Curves.—The sharpest curve is of 478·3 feet radius.

Gradients.—The ruling gradient is 1 in 100.

Agreement—

The line was constructed, and is being maintained and worked, by the Great Indian Peninsula Railway Company for the Dhond-Baramati Railway Company under the terms of an agreement which is under consideration.

Statistics of working—

Year.	Mileage open at end of each year.	Total capital outlay, including suspense, to end of each year, *i.e.*, outlay on (*i*) lines open and (*ii*) lines partly or wholly under construction.	Gross earnings.	Net earnings.	Percentage of net earnings on total capital outlay given in column (3).	Rebate from (+), or share of surplus profits payable to, (—), the Great Indian Peninsula railway.	Total income.	Percentage of total income on total capital outlay given in column (3).	Earnings per mile per week.	Proportion of expenses to earning
1	2	3	4	5	6	7	8	9	10	11
	Miles.	Rs.	Rs.	Rs.		Rs.	Rs.	Rs.	Rs.	
1914-15	27·26	11,81,373	50,233	27,628	2·34	+12,448	40,076	3·39	35	45·00
1915-16	27·26	11,61,931	68,289	37,559	3·23	+20,948	58,507	5·03	43	45·00
1916-17	27·26	11,60,314	78,246	43,035	3·71	+14,507	57,542	4·96	55	45·00
1917-18	27·26	11,62,368	95,049	52,277	4·50	—5,841	58,118	5·00	67	45·00

Ellichpur-Yeotmal railway (2′ 6″ gauge)—

Date of registration of the Company.—1910.

This line was constructed by the Great Indian Peninsula Railway Company for a Branch Line Company called the Central Provinces Railways Company.

GREAT INDIAN PENINSULA RAILWAY SYSTEM—*contd.*

Ellichpur-Yeotmal railway (2' 6" gauge)—*contd.*

Progress in opening—

Sections of railway.	Date of opening.	Miles.	Total.
1	2	3	4
Ellichpur to Murtajapur	1-12-13	47·65	
Murtajapur to Karanja	1-11-14	19·83	
Karanja to Yeotmal	30-9-15	50·18	
TOTAL OPEN MILEAGE	...	...	117·66

Details of construction—

Permanent-way.—The permanent-way consists of 35-lb. flat-footed steel rails laid on pressed steel pea-pod sleepers.

Ballast.—The line is chiefly ballasted with sand. Banks at places are ballasted with moorum.

Fencing.—Only the station yards are fenced.

Curves.—The sharpest curve is of 637 feet radius.

Gradients.—The ruling gradient is 1 in 100.

Contracts—

Dated the 27th March 1916, *between the Secretary of State and the Central Provinces Railways Company*, as to the construction, maintenance and working of the Ellichpur-Yeotmal railway.

Dated the 15th December 1916, *between the Secretary of State and the Great Indian Peninsula Railway Company*, as to the maintenance and working of the Ellichpur-Yeotmal railway.

Dated the 3rd October 1917 (supplemental to the contract of 27th March 1916), *between the Secretary of State and the Central Provinces Railways Company*, as to the construction and working of the Pulgaon-Arvi railway as part of, and included, in the original undertaking.

Main provisions of contract—

(i) *Land.*—Land in British territory provided free of cost.

(ii) *Government aid.*—The Government shall allow to the Company, at the end of each year by way of rebate such a sum, not exceeding in any year the net earnings of the Great Indian Peninsula railway, from all traffic originating or terminating at stations of this railway, as shall together with the net earnings of the Company make up an amount equal to interest for the year at a rate of 5 per cent per annum on the paid up share capital of the Company. When the net earnings do not suffice to pay interest at 5 per cent, the Company shall be paid by the working agency out of the working expenses the sum of Rs. 15,000 for each year towards the office expenses and expenses of management and direction of the Company and also pay all such legal expenses as shall have been incurred by the Company and are debitable to Revenue.

(iii) *Terms of working.*—The line is managed, maintained, worked and supplied with rolling-stock for 45 per cent of its gross earnings.

(iv) *Distribution of profits.*—When the net earnings of the Company exceed the minimum amount sufficient to give a return of 5 per cent per annum such excess shall be applied towards the payment of office expenses, expenses of management and direction of the Company up to a limit of Rs. 21,000 and the balance, if any, shall be divided equally between Government and the Company.

(v) *Rates and fares.*—The working agency shall charge such rates and fares for the carriage of goods and passengers, as shall be agreed upon between the Secretary of State and the working agency, and adopt such classification of goods as shall be in force on the Great Indian Peninsula railway.

(vi) *Special obligations as to the conveyance of—*

(*a*) Mails, troops, police, high Government officials and Government stores.—

(*b*) Government bullion and coin, and the persons in charge thereof—

} All business connected with the management and maintenance of the line and conducting the traffic thereon, including police and telegraphs and telegraphic appliances, shall in all respect, as far as practicable, be carried on in the same manner and subject to the same regulations and control by the Secretary of State as the like business on the Great Indian Peninsula railway.

(vii) *Power of the Government to determine agreement.*—The Government may, by giving not less than twelve months' 'notice of purchase,' determine the contract on the 31st March 1947 or on the 31st March in the last year of any subsequent period of ten years.

If the contract is determined by 'notice of purchase,' the Government shall pay to the Company 25 times the amount of the average yearly net earnings (excluding payments on account of rebate) derived by the Company during the three years immediately preceding the time at which the contract shall be determined, subject to a limit of 20 per cent. in excess of, but not less than, the total capital expenditure of the Company.

The Government may also, by giving twelve months' 'notice of special purchase', determine the contract at any time in the following cases :—

(*a*) when it is considered desirable that the gauge of the railway should be altered ;

(*b*) when it is considered desirable to convert the railway into a line of through communication and

GREAT INDIAN PENINSULA RAILWAY SYSTEM—*contd.*

Ellichpur-Yeotmal railway (2′ 6″ gauge)—*concld.*

Main provisions of contract—*concld.*

(*c*) when it is considered desirable to extend the railway (without altering the gauge or making the line part of a through route), and the Company is unable or unwilling to supply the necessary capital for such extension.

If the contract be determined by 'notice of special purchase', the Government to pay to the Company 25 times the average yearly net earnings (excluding payments on account of rebate) of the Company during the last preceding three years, or 115 per cent of the total capital expenditure of the Company, whichever may be the greater.

(viii) *Power of the Company to surrender contracts.*—Nil.

(ix) *Term of contract* [*if not determined under* (vii)].—None specified.

Statistics of working (Including Pulgaon-Arvi railway from 1917-18.)—

Year.	Mileage open at end of each year.	Total capital outlay, including suspense, to end of each year, *i.e.*, outlay on (*i*) lines open and (*ii*) lines partly or wholly under construction.	Gross earnings.	Net earnings.	Percentage of net earnings on total capital outlay given in column (3).	Rebate from, (+), or share of surplus profits payable to (—), the Great Indian Peninsula railway.	Total income.	Percentage of total income on total capital outlay given in column (3).	Earnings per mile per week.	Proportion of expenses to earnings.
1	2	3	4	5	6	7	8	9	10	11
	Miles.	Rs.	Rs.	Rs.		Rs.	Rs.	Rs.	Rs.	
1913-14 .	47·65	24,35,662	65,505	36,027	1·48	...	36,027	1·48	196	45·00
1914-15 .	67·48	62,43,618	2,86,101	1,57,356	2·52	...	1,57,356	2·52	82	45·00
1915-16 .	117·23	66,53,204	4,46,479	2,45,563	3·69	+4,402	2,49,965	3·76	73	45·00
1916-17 .	117·66	67,58,039	5.96,916	3,28,304	4·86	+16,590	3,44,894	5·10	98	45·00
1917-18 .	139·49	83,85,992	6,67,556	3,59,455	4·29	+32,115	3,91,570	4·67	92	*46·15

* The increase of 1·15 percent is due to the expenditure incurred direct by the Company on account of loan of rolling-stock from the Pachora-Jamner railway.

Pulgaon-Arvi railway (2′ 6″ gauge)—

Date of registration of the Company.—1914.

Sanction to the construction of this line by the Great Indian Peninsula Railway Company, for the Central Provinces Railways Company, was conveyed in Railway Board's Notification No. 248, dated the 30th September 1914.

Progress in opening—

Section of railway.	Date of opening.	Miles.	Total.
1	2	3	4
Pulgaon to Arvi	25-9-17	21·83	21·83

Details of construction—

Permanent-way.—The permanent-way consists of 35-lb. flat-footed rails laid partly on steel sleepers and partly on sal sleepers.

Ballast.—The line is ballasted with stone.

Fencing.—Only station platforms, B class level crossings and some cuttings alongside the Public Works Department road are fenced.

Curves.—The sharpest curve is of 537 feet radius.

Gradients.—The steepest gradient is 1 in 80.

Contracts—
Main provisions of contracts— } As noted under Elichpur-Yeotmal railway.

Statistics of working—Included with Elichpur-Yeotmal railway.

Matheran Light railway (2′ 0″ gauge)—

Date of registration of the Company.—16th September 1908.

Progress in opening—

Section of railway.	Date of opening.	Miles.	Total.
1	2	3	4
Neral to Matheran	22-3-07	12·61	12·61

Details of construction.—

Permanent-way.—The permanent-way consists of 30-lb. flat-footed steel rail laid on half-round teak and other wood sleepers.

Ballast.—Broken stone.

Fencing.—Not fenced.

Curves.—The sharpest curve is of 60 feet radius.

Gradients.—The gradient is 1 in 20 compensated.

GREAT INDIAN PENINSULA RAILWAY SYSTEM—*concld.*

Matheran Light railway (2′ 0″ gauge)—*concld.*

Local Government Order and agreement.—

The Matheran Tramway order published under the Bombay Government, Public Works Department (Railway), Notification No. 34, dated the 28th July 1904, authorising the construction, maintenance and working of the line by the Promoter.

Further order published under the Bombay Government, Public Works Department (Railway), Notification No. 47, dated the 19th November 1907, and Letter No. 30, dated the 11th January 1908, from the Secretary to the Government of Bombay, Public Works Department (Railway Branch) to the Promoter, Matheran Light railway. } effecting certain amendments in the Matheran Tramway order of 1904.

Agreement, dated the 30th October 1909, *between the Matheran Steam Light Tramway Company and the Great Indian Peninsula Railway Company*, as to the control of traffic and working, by the latter, of the line.

N.B.—A revised agreement having retrospective effect from the 1st April 1915 was concluded after the 31st March 1918.

Main provisions of Local Govrnment Order and Agreement—

(i) *Land.*—Government land was provided free of cost. Private land to be acquired by the Government at the expense of the Tramway Company.

(ii) *Government aid.*—The line is the property of the Matheran Steam Light Tramway Company, who provide all rolling-stock, locomotives, machinery and plant, and maintain the way and works; the working of traffic, train arrangements, and the keeping and auditing of the Revenue Accounts being under the control of the Great Indian Peninsula Railway Company.

(iii) *Terms of working.*—The gross receipts are treated as those of the Great Indian Peninsula Railway Company, which retains thereout the actual expenditure incurred by it, including the cost of stores consumed on the Matheran Light railway in the Traffic and Audit Departments, and for station and running staff, printing, stationery and all other expenses connected therewith, *plus* 5 per cent per annum as rent on the actual cost of new structures, machinery, plant and furniture, and 7½ per cent per annum for ballast, permanent-way, etc., including maintenance and renewal, for the sole use of the light railway with a certain proportion (based on the weight of local and interchanged traffic) of the annual rent, at the rates above noted, for new joint works, etc.

(iv) *Distribution of profits.*—The net receipts are to be paid over to the Light Railway Company.

(v) *Rates and fares.*—To be within the maxima sanctioned in the Tramway Order, the rules, conditions, etc., in respect thereto being the same as obtain on the Great Indian Peninsula railway.

(vi) *Special obligations as to the conveyance of.*—
(*a*) Mails, troops, police, high Government officials and Government stores.—
(*b*) Government bullion and coin, and the persons in charge thereof.— } Not specified.

(vii) *Power of the Railway Company to determine agreement.*—
(viii) *Power of the Tramway Company to determine agreement.*— } The agreement is terminable on the 31st March or 30th September in any year on six months' notice by either party to the other.
(ix) *Term of agreement.*—

Government may purchase the line as a going concern on the 1st January 1940, or at the expiration of any subsequent period of five years, for a sum representing the aggregate of 25 times the average of its net earnings for the three calendar years immediately preceding the date of purchase.

Statistics of working (Those for 1907 will be found in Appendix 38 to the Railway Administration Report for 1907)—

Year.	Mileage open at end of each year.	Total capital outlay, including suspense, to end of each year, *i.e.*, outlay on (i) lines open and (ii) lines partly or wholly under construction.	Gross earnings.	Net earnings.	Percentage of net earnings on total capital outlay given in column (3).	Earnings per mile per week.	Proportion of expenses to earnings.
1	2	3	4	5	6	7	8
	Miles.	Rs.	Rs.	Rs.		Rs.	
1908	12·61	10,55,007	53,410	8,456	0·80	117	84·17
1909	12·61	11,12,071	64,873	27,612	2·48	144	57·44
1910	12·61	11,34,119	55,951	13,513	1·19	123	75·85
1911	12·61	11,36,563	74,352	39,483	3·47	158	46·90
1912	12·61	11,38,245	78,089	36,634	3·25	163	53·09
1st qr. of 1913	12·61	11,38,720	19,401	3,843	0·34	118	80·19
1913-14	12·61	11,38,848	74,545	33,410	2·84	114	55·18
1914-15	12·61	11,38,848	84,325	27,558	2·42	129	67·32
1915-16	12·61	11,38,848	84,185	16,278	1·43	128	80·66
1916-17	12·61	11,41,805	86,664	26,495	2·32	132	69·43
1917-18	12·61	11,42,757	87,222	30,945	2·71	133	64·52

Pachora-Jamner railway (2′ 6″ gauge)—

Date of registration of the Company.—10th February 1915.

Sanction to the construction of this line by the Great Indian Peninsula Railway Administration, for the Pachora-Jamner Railway Company, was conveyed in Railway Board's Notification No. 64, dated the 17th March 1915.

Progress in opening—

Section of railway.	Date of opening.	Miles.	Total.
1	2	3	4
Pachora to Jamner (sanctioned on 17th March 1915)	...	34·62	34·62

MADRAS AND SOUTHERN MAHRATTA RAILWAY SYSTEM.

Chairman.—Colonel W. V. Constable, R.E.
Acting Secretary.—Percy A. Cory, Esq.
Offices.—25 Buckingham Palace Road, Westminster, S.W.

Date of registration of the former guaranteed Company.—1853.

The former Madras Guaranteed Railway Company's contract having expired on the 31st December 1907 the lines owned by that Company were purchased by the Secretary of State for India, and on the 1st January 1908 the then existing Madras railway (with the exception of the Jalarpet-Mangalore section), together with the 3′ 3⅜″ gauge sections of the South Indian railway from Katpadi to Gudur and Pakala to Dharmavaram, was made over to the Southern Mahratta Railway Company for working, the enlarged Company being styled the Madras and Southern Mahratta Railway Company.

Lines comprised in the system—The Madras and Southern Mahratta railway system is made up of—

	Open line. Miles.	Under construction or sanctioned for construction. Miles.	Total. Miles.
(*a*) Madras and Southern Mahratta railway (5′ 6″ gauge)	1,031·73	...	1,031·73
(*b*) Kolar Gold-fields railway (5′ 6″ gauge)	9·88	...	9·88
(*c*) Tenali-Repalle railway (5′ 6″ gauge)	21·50	...	21·50
(*d*) Madras and Southern Mahratta railway (3′ 3⅜″ gauge)	1,518·13	...	1,518·13
(*e*) Bezwada-Masulipatam railway (3′ 3⅜″ gauge)	51·80	...	51·80
(*f*) Birur-Shimoga railway (3′ 3⅜″ gauge)	37·92	...	37·92
(*g*) Dhone-Kurnool railway (3′ 3⅜″ gauge)	32·00	...	32·00
(*h*) Hindupur (Yesvantpur-Mysore Frontier) railway (3′ 3⅜″ gauge)	51·35	...	51·35
(*i*) Kolhapur State railway (3′ 3⅜″ gauge)	29·27	...	29·27
(*j*) Mysore-Nanjangud railway (3′ 3⅜″ gauge)	15·80	...	15·80
(*k*) Mysore-section (Madras and Southern Mahratta) (3′ 3⅜″ gauge)	296·28	...	296·28
(*l*) Sangli State railway (3′ 3⅜″ gauge)	4·90	...	4·90
(*m*) West of India Portuguese railway (3′ 3⅜″ gauge)	51·10	...	51·10
(*n*) Alnavar Dandeli (3′ 3⅜″ gauge)	...	19·12	19·12
Total	3,151·66	19·12	3,170·78

Running powers—

Foreign lines over home line—

Bengal-Nagpur railway, Waltair to Vizagapatam (including the wharf and swamp lines)	for passenger and goods trains.	4·97
Nizam's Guaranteed State railway, outer signal at Bezwada to Bezwada station		0·89
South Indian railway, over whole or any part of the Madras-Bangalore section		219·00
Bangalore-Chik Ballapur Light railway, Yesvantpur to Yelahanka, with the help of a 3rd rail		6·85
	Total	231·71

Madras and Southern Mahratta railway (5′ 6″ gauge)—

The Madras and Southern Mahratta 5′ 6″ gauge railway is defined to be the former Madras railway (with the exception of the Jalarpet-Mangalore section), and the southern section of the former East Coast railway (called the North-East line of the former Madras railway).

Progress in opening—

Sections of railway.	Date of opening.	Miles.	Total.	Grand total.	Remarks.
1	2	3	4	5	6
SOUTH-WEST LINE—					
Main line—					
Madras to Veyasarpaudy	7-4-73	2·16			
Veyasarpaudy to Walajah Road (Arcot)	1-7-56	63·22			
Walajah Road (Arcot) to Katpadi	7-5-57	14·96			
Katpadi to Gudiyattam	19-5-58	15·36			
Gudiyattam to Ambur	16-1-60	17·01			
Ambur to Vaniyambadi	1-2-60	9·98			
Vaniyambadi to Jalarpet	23-5-60	9·86			
			132·55		
Branches—					
Rayapuram branch—					
Veyasarpaudy to Rayapuram	1-7-56	2·16			
Rayapuram to Beach	22-1-00	1·03			
Washermenpet to Basin bridge	15-3-07	1·05			
			4·24		
Ranipet branch—					
Walajah Road (Arcot) to Ranipet	17-4-99	4·17			
			4·17		
Bangalore branch—					
Jalarpet Junction to Bangalore Cantonment	1-8-64	84·37			
Bangalore Cantonment to Bangalore City	1-7-82	3·05			
			87·42		
Carried over	...	...	...	228·38	

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MADRAS AND SOUTHERN MAHRATTA RAILWAY SYSTEM—*contd.*

Madras and Southern Mahratta railway (5′ 6″ gauge)—*contd.*

Progress in opening—*concld.*

Sections of railway.	Date of opening.	Miles.	Total.	Grand total.	Remarks.
1	2	3	4	5	6
Brought forward ...	...	...	...	228·38	
NORTH-WEST LINE—					
Main line—					
Arkonam to Nagari.	4-3-61	17·27			
Nagari to Puttur	8-12-61	9·59			
Puttur to Renigunta	15-9-62	14·46			
Renigunta to Reddipalle.	1-10-64	38·02			
Reddipalle to Cuddapah.	1-9-65	39·59			
Cuddapah to Muddanuru	1-8-66	34·31			
Muddanuru to Tadpatri.	1-9-68	32·07			
Tadpatri to Gooty	1-8-69	29·72			
Gooty to the Tungabhadra river	12-12-70	75·33			
Tungabhadra to Raichur	15-3-71	17·92			
			308·28		
NORTH-EAST LINE—				308·28	
Basin bridge to Korukkupettai	15-3-07	0·85			
Washermenpet to Ennur	22-2-96	8·25			
Ennur to Gudur	23-2-99	75 25			
Gudur to Nellore	*1-11-88	23·75			* The date of opening of the original 3′ 3¾″ gauge line which was converted to, and opened on the 5′ 6″ gauge on the 1st November 1899.
Nellore to Kistna Canal	20-12-98	155·00			
Kistna Canal to Bezwada	15-7-97	3·06			
Bezwada to Kovvur	20-2-93	88·24			
Kovvur to Rajahmundry	6-8-00	4·69			
Rajahmundry to the Junction point near Waltair	15-7-93	119·80			
*Simhachalam Junction point near Waltair station to Waltair.	15-7-93	4·25			
			483 14		
Branches—					
Samalkot Junction to Cocanada port branch . .	15-7-93	9·75			
Waltair to end of branch near Vizagapatam station	15-7-93	2·18			
			11·93	495·07	
TOTAL OPEN MILEAGE . .	...	...	...	1,031·73	
DOUBLE LINE—					
Washermenpet to Basin bridge	15-3-07	1·05			
Washermenpet to Veyasarpaudy	14-9-01	1·02			
Madras to Veyasarpaudy Junction	7-4-73	2·16			
Veyasarpaudy Junction to Perambur	7-2-74	1·30			
Perambur to Avadi.	1-5-77	9·54			
Avadi to Tiruvallur.	20-7-77	12·89			
Tiruvallur to Arkonam	28-8-77	16·52			
Bengal-Nagpur railway north outer signal to north facing point at Waltair.	...	0·46			
TOTAL DOUBLE LINE .	...	...	44·94		

Details of construction—

Permanent-way.—The South-West down line, from Madras to mile 42½ and from mile 59½ to mile 134½, and up line, from Madras to mile 12 are laid with 75-lb. bull-headed steel rails on cast iron pots. The remainder of the South-West line, *i.e.*, from mile 42½ to mile 59½ and from mile 134½ to Bangalore, and portion of up line, from mile 12 to mile 29½, the North-East line, from Basin bridge to mile 41½, and the North-West line, from Arkonam to mile 231·84, are laid with 80-lb. bull-headed steel rails on cast iron pots, except 2 miles, from mile 96 to mile 98, on the North-West line which is laid with 76-lb. bull-headed rails. The South-West up line, from mile 29½ to Arkonam, and the North-West line, from mile 231·84 to Raichur, are laid with 75-lb. double-headed steel rails on cast iron pots. The remainder of the North-East line, from mile 41½ to mile 266½, is laid with 75-lb. flat-footed steel rails on timber sleepers, except a portion, between miles 207 and 221, which is laid on pot sleepers. From mile 266½ to mile 355½ the line is laid with 75-lb. flat-footed steel rails on pot sleepers, except between miles 336¾ and 343 which is laid on timber sleepers. The line between miles 355½ and 483 is laid with 75-lb. flat-footed steel rails on timber and steel trough sleepers. The timber sleepers are being gradually renewed by steel trough sleepers.

The Walajah Road-Ranipet branch is laid with 75-lb. double-headed steel rails on cast iron pots, except for a short length where it is laid with 65-lb. double-headed iron rails on timber sleepers.

The Cocanada, and Vizagapatam branches are laid with 75-lb. flat-footed steel rails on timber sleepers.

Ballast.—The line is ballasted with stone and sand, chiefly the latter.

Fencing.—The North-West and South-West lines are fenced throughout and the North-East line only in the vicinity of towns, stations and level crossings.

Curves.—The sharpest curve is of 700 feet radius.

Gradients.—The ruling gradient between Madras and Jalarpet is 1 in 159; between Jalarpet and Bangalore, 1 in 80 (except at Kuppam Ghat where it is 1 in 68 and between Bangalore cantonment and Bangalore city there is a gradient of 1 in 78); between Walajah Road and Ranipet, 1 in 150; between Arkonam and Raichur, 1 in 80 (except at Ballapalli Ghat where it is 1 in 60) between Madras and Bezwada, 1 in 200; and between Bezwada and Waltair, 1 in 150.

Contracts—

Dated the 1st June 1882 (called the original contract), *between the Secretary of State and the former Southern Mahratta Railway Company*, as to the construction and working of a system of railways in the South Mahratta country to be called the Southern Mahratta railway.

MADRAS AND SOUTHERN MAHRATTA RAILWAY SYSTEM—*contd*

Madras and Southern Mahratta railway (5′ 6″ gauge)—*contd.*

Contracts—*concld.*

Dated the 28th October 1885 (supplemental to that of 1882), *between the Secretary of State and the former Southern Mahratta Railway Company*, as to the construction and working of the West Deccan railway.

Dated the 31st August 1887 (supplemental to those of 1882 and 1885), *between the Secretary of State and the former Southern Mahratta Railway Company*, as to the construction and working of a line from Ranibennur to Harihar and a line from Bellary to Guntakal.

Dated the 31st August 1887 (supplemental to those of 1882, 1885 and 1887), *between the Secretary of State and the former Southern Mahratta Railway Company*, as to the construction, maintenance and working of the Mysore State railway.

Dated the 27th February 1889 (supplemental to those of 1882, 1885 and 1887), *between the Secretary of State and the former Southern Mahratta Railway Company*, as to the completion and working of the Bellary-Kistna railway.

Dated the 21st August 1898 (supplemental to those of 1882, 1885, 1887 and 1889), *between the Secretary of State and the former Southern Mahratta Railway Company*, as to the working of the British section of the Guntakal-Yesvantpur railway.

Dated the 8th April 1903 (supplemental to those of 1882, 1885, the secondly mentioned contract of 1887, and that of 1889), *between the Secretary of State and the former Southern Mahratta Railway Company*, as to the adoption of 1*s.* 4*d.* as the "prescribed" rate of exchange.

Dated the 26th June 1908 (called the principal contract), *between the Secretary of State and the Madras and Southern Mahratta Railway Company*, as to the continuance of the existing contracts subject to the variations and modifications thereof as therein set forth.

Dated the 16th March 1911, *between the Secretary of State and the Madras and Southern Mahratta Railway Company*, supplemental to, and in amendment of certain particulars in, that of 1908.

Despatch from the Secretary of State, No. 66 Railway, dated the 9th August 1912, in regard to the issue of further capital by the Company.

Dated the 11th February 1914 (supplemental to that of 1908), *between the Secretary of State and the Madras and Southern Mahratta Railway Company*, in regard to the issue of debentures and debenture stock.

Dated the 20th May 1914 (supplemental to the contracts of 1882, 1885, 1887, 1889, 1898, 1903, 1908 and 1911), *between the Secretary of State and the Madras and Southern Mahratta Railway Company*, as to the adoption of the Government financial year for the preparation of accounts.

Dated the 12th August 1914 (supplemental to the contracts of 1882, 1885, 1887, 1889, 1898, 1903 1908, 1911 and 20th May 1914), *between the Secretary of State and the Madras and Southern Mahratta Railway Company*, as to the construction, maintenance and working of the Guntur-Tenali section of the Guntur-Repalle railway as part of the undertaking of the Company.

Main provisions of contracts—

(i) *Land.*—Provided by the Government at the cost of capital.

(ii) *Government aid.*—(*a*) Interest in sterling is guaranteed at 3½ per cent per annum on the nominal amount of capital stock, for the time being, of the Company, and is payable half-yearly by the Secretary of State, the Government being entitled to retain out of the Company's share of surplus profits for the year the rupee-equivalent of this interest. If the Company's share for the year be less than the guaranteed interest, the deficiency is not to be made good out of the Company's share of a subsequent year.

(*b*) Moneys for capital expenditure are provided at the Secretary of State's option, either by advances made by him, or by the issue of debentures or debenture stock or further capital stock of the Company : such issues can only be made with the Secretary of State's approval.

(*c*) Debentures falling due are discharged by advances made by the Secretary of State.

[NOTE.—The advances made by the Secretary of State under (*b*) and (*c*) above are, until repaid treated as further capital contributed by him. All moneys raised by the Company on debentures or debenture stock or capital stock are applied, in the first place, to the repayment of these advances.]

(*d*) Interest due on debentures or debenture stock is paid in sterling by the Secretary of State.

[NOTE.—The rupee-equivalent of this interest is repaid to the Secretary of State out of the net earnings of each half-year.]

(iii) *Distribution of profits.*—After deducting, from the gross earnings of the Company's and State lines for the half-year, the working expenses (which include the contributions made under the rules to the Provident Fund and the haulage payable to the South Indian railway), the net earnings are applied :—

(*a*) in payment of rebate to the South Indian railway and to the Bezwada-Masulipatam railway, if any [see parenthetical note under (*c*) below] ;

(*b*) in repayment to the Secretary of State of the interest paid on debentures [see (ii) (*d*) above]. But the undertaking is to be credited half-yearly with a sum equal to the guaranteed interest paid on the average amount, if any, held by the Secretary of State during the half-year, of the unexpended balances of issues of capital made for the purposes of the undertaking ; and,

(*c*) the surplus is divided between the Secretary of State and the Company in proportion to the respective shares in which the capital, for the time being, (excluding debenture capital) has been contributed by them. The Secretary of State's capital is taken at a sum of £11¼ millions, to which is added the amount up to date of his advances; and the Company's capital at £5 millions, the amount for the time being of their share capital.

MADRAS AND SOUTHERN MAHRATTA RAILWAY SYSTEM—*contd.*

Madras and Southern Mahratta railway (5′ 6″ gauge)—*concld.*

Main provisions of contracts—*concld.*

[NOTE.—25 per cent of the gross earnings derived by the Madras-Bangalore section from traffic carried over that section in South Indian railway trains is payable as haulage to the South Indian railway. In addition, the South Indian railway receives a rebate of 25 per cent of the gross earnings derived by the Madras-Bangalore section from the traffic interchanged between that section and the Jalarpet-Mangalore section, *viâ* Jalarpet.

The terms of the rebate payable to the Bezwada-Masulipatam railway are given under Bezwada-Masulipatam railway (3′ 3⅜″ gauge).]

(iv) *Rates and fares.*—Maxima and minima for each class and description of passengers and goods are fixed by the Government, who also prescribe the several classes and descriptions. If the Government require the Company to reduce the rates for salt below those in force on the 28th June 1908, the Company are to be compensated for any loss ensuing.

(v) *Special obligations as to the conveyance of.*—

(*a*) Mails, troops, police, high Government officials and Government stores.—
(*b*) Government bullion and coin, and the persons in charge thereof.—

} To be conveyed on the same general conditions and at the rates in force on State railways of similar gauge.

(vi) *Power of the Government to determine contract.*—The railway and all its appurtenances are absolutely the property of the Government, which may determine the contract on the 31st December 1937, or on the 31st December in any succeeding fifth year reckoning from that date, by giving to the Company in London not less than twelve months' previous notice. Upon the termination of the contract the Company are to give the Government the possession of the railway; and the Government are to pay the Company a sum equal to the nominal amount of its share capital, *viz.*, £5,000,000, and of any additional paid up capital stock that may have been issued for the purpose of the Company's and State lines.

(vii) *Power of the Company to surrender contract.*—Nil.

(viii) *Term of contract.*—The contract is determinable only as noted under (vi) above.

Statistics of working—

Year.	Mileage open at end of each year.	Total capital outlay, including suspense, to end of each year, *i.e.*, outlay on (*i*) lines open and (*ii*) lines partly or wholly under construction.	Gross earnings.	Net earnings.	Percentage of net earnings on total capital outlay given in column (3).	Earnings per mile per week.	Proportion of expenses to earnings.
1	2	3	4	5	6	7	8
	Miles.	Rs.	Rs.	Rs.		Rs.	
1908	1,031·73	16,69,79,297	1,64,22,663	44,96,942	2·69	306	72·62
1909	1,031·73	17,06,51,720	1,79,33,335	72,97,315	4·28	334	59·31
1910	1,031·73	17,37,06,686	1,88,12,095	80,93,571	4·66	351	56·98
1911	1,031·73	17,73,67,663	1,96,36,910	89,15,549	5·03	366	54·60
1912	1,031·73	17,80,88,139	2,16,88,462	1,03,95,264	5·84	404	52·07
1st qr. of 1913	1,031·73	17,97,20,709	59,13,814	32,68,211	1·82	441	44·74
1913-14	1,031·73	18,26,82,343	2,26,70,849	1,04,31,713	5·71	423	53·99
1914-15	1,031·73	18,59,51,863	2,33,73,105	1,10,00,466	5·92	436	52·94
1915-16	1,047·59	18,63,26,872	2,58,28,354	1,26,37,710	6·78	481	51·07
1916-17	1,047·61	18,80,59,395	2,98,17,094	1,50,86,189	8·02	547	49·40
1917-18	*1,031·73	18,95,62,451	3,33,04,402	1,83,63,449	9·69	616	44·86

* The decrease is due to the dismantlement of the Guntur-Tenali branch as a temporary war measure.

Kolar Gold-fields' railway (5′ 6″ gauge)—

The railway was constructed by the Mysore Durbar in order to provide facilities for the gold-fields.

Progress in opening—

Section of railway.	Date of opening.	Miles.	Total.
1	2	3	4
Bowringpet to Marikuppam	1-6-94	9·88	9·88

Details of construction—

Permanent-way.—The line is laid with 76-lb. bull-headed steel rails on cast iron pot sleepers.

Ballast.—The line is ballasted with stone and sand, chiefly the former.

Fencing.—The line is fenced throughout.

Curves.—There are no curves with a radius of less than 1,000 feet.

Gradients.—The ruling gradient is 1 in 66.

MADRAS AND SOUTHERN MAHRATTA RAILWAY SYSTEM—*contd.*

Kolar Gold-fields railway (5′ 6″ gauge)—*concld.*

Agreement and contract—

Agreement, dated the 1st July 1902, *between the Mysore Government and the former Madras Railway Company*, as to working and maintenance with effect from 1st January 1901.

Contract, dated the 26th June 1908 (called the principal contract), *between the Secretary of State and the Madras and Southern Mahratta Railway Company*, as to the continuance of the existing agreement subject to the variations and modifications thereof as therein set forth.

Main provisions of agreement and contract.

(i) *Land.*—Provided by the Mysore Durbar at the cost of capital.

(ii) *Government aid.*—The line (which is the property of the Mysore Durbar) is maintained, stocked and worked by the Madras and Southern Mahratta Railway Company in all respects (except only as to capital expenditure which is provided by the Durbar) as part of their own undertaking.

(iii) *Terms of working.*— } Maintenance and working expenses are calculated at the same proportion
(iv) *Distribution of profits.*— } of the gross earnings of the Branch as obtains on the Company's system, as a whole, including the Branch. But in the case of accident or damage caused by extraordinary casualty, *e.g.*, by floods, each party bears its own cost of repairs, such cost being eliminated from the Company's revenue account before the percentage of working expenses referred to above is arrived at. The Company works the Branch for the maintenance and working expenses as above, *plus* cost of new minor works and 5 per cent of the gross earnings of the Branch for the use of rolling-stock, *plus* the amount due by the Branch for use of the joint station at Bowringpet. In addition the Company receives $\frac{1}{20}$th of the balance which remains after payment of interest on the capital expenditure of the Branch incurred after the 31st December 1907. Besides the "ordinary" contribution to the Provident Fund, the Branch is liable, when it earns more than 4 per cent on its capital outlay, for a further contribution amounting to the difference between the "ordinary" contribution and 1 per cent of its net receipts.

(v) *Rates and fares.*— } The same as from time to time obtain on the Company's lines.
(vi) *Special obligations as to the conveyance of.*—
(*a*) Mails, troops, police, high Government officials and Government stores.—
(*b*) Bullion and coin.—

(vii) *Power of the Government to determine agreement.*—Nil.

(viii) *Power of the Government to determine contract.*—As in the case of Madras and Southern Mahratta railway (5′ 6″ gauge).

(ix) *Power of the Durbar to determine agreement.*—Subject to six months' notice expiring only on the 30th June or the 31st December of any year.

(x) *Power of the Durbar to determine contract.*—Nil.

(xi) *Power of the Company to determine agreement.*—Subject to six months' notice expiring only on the 30th June or the 31st December in any year; and also to withdraw from the agreement if sanction be accorded to the construction of a competing line to the gold-fields.

(xii) *Power of the Company to surrender contract.*—Nil.

(xiii) *Term of agreement.*—Not specified.

(xiv) *Term of contract.*—As in the case of Madras and Southern Mahratta railway (5′ 6″ gauge).

Statistics of working (Those for the periods prior to 1908 will be found in Appendix 38 to the Railway Administration Report for 1907.)—

Year.	Mileage open at end of each year.	Total capital outlay, including suspense, to end of each year, *i.e.*, outlay on (*i*) lines open and (*ii*) lines partly or wholly under construction.	Gross earnings.	Net earnings.	Percentage of net earnings on total capital outlay given in column (3).	Earnings per mile per week.	Proportion of expenses to earnings.
1	2	3	4		6	7	8
	Miles.	Rs.	Rs.	Rs.		Rs.	
1908 . . .	9·88	12,07,860	1,98,191	51,095	4·23	386	74·22
1909 . . .	9·88	12,09,189	1,59,004	52,739	4·36	309	66·83
1910 . . .	9·88	12,06,368	1,55,747	54,733	4·54	303	64·86
1911 . . .	9·88	12,06,678	1,74,398	63,927	5·30	339	63·34
1912 . . .	9·88	12,06,635	1,53,344	58,791	4·87	298	61·66
1st qr. of 1913	9·88	12,06,635	45,990	20,664	1·71	358	55·07
1913-14 . .	9·88	12,08,566	1,73,840	65,189	5·39	338	62·50
1914-15 . .	9·88	12,09,832	1,77,599	66,006	5·46	346	62·83
1915-16 . .	9·88	12,09,192	1,71,811	70,145	5·80	334	59·17
1916-17 . .	9·88	12,09,193	1,69,802	71,833	5·94	331	57·70
1917-18 . .	9·88	12,12,706	1,71,628	79,971	6·59	334	53·40

Tenali-Repalle railway (5′ 6″ gauge)—

The construction of this line by the Madras and Southern Mahratta Railway Company, at the cost of the District Board of Guntur, was sanctioned in Railway Board's Notification No. 110, dated the 9th April 1913.

Progress in opening—

Section of railway.	Date of opening.	Miles.	Total.
1	2	3	4
Tenali to Repalle	8-3-16	21·50	21·50

MADRAS AND SOUTHERN MAHRATTA RAILWAY SYSTEM—*contd.*

Tenali-Repalle railway (5′ 6″ gauge)—*concld.*

Details of construction—

Permanent-way.—The line is laid with 75-lb. flat-footed British Standard steel rails on timber sleepers.

Ballast.—The line is ballasted with sand.

Fencing.—Only the station yards are fenced.

Curves.—The sharpest curve has a radius of 1,432 feet.

Gradients.—The ruling gradient is 1 in 150.

Contract—
Main provisions of contract— } The line is being worked under the terms of a contract which is under consideration.

Statistics of working—

Year.	Mileage open at end of each year.	Total capital outlay, including suspense, to end of each year, *i.e.*, outlay on (*i*) lines open and (*ii*) lines partly or wholly under construction.	Gross earnings.	Net earnings.	Percentage of net earnings on total capital outlay given in column (3).	Earnings per mile per week.	Proportion of expenses to earnings.
1	2	3	4	5	6	7	8
	Miles.	Rs.	Rs.	Rs.		Rs.	
1915-16	21·09	12,14,651	3,169	1,585	0·13	75	50·00
1916-17	21·50	14,24,906	1,06,811	53,405	3·75	96	50·00
1917-18	21·50	14,85,815	1,09,583	54,792	3·69	98	50·00

Madras and Southern Mahratta railway (3′ 3¾″ gauge)—

The Madras and Southern Mahratta 3′ 3¾″ gauge railway is the former Southern Mahratta railway in amalgamation with the sections (Pakala to Dharmavaram and Katpadi to Gudur) of the South Indian railway taken over, and the lines formerly known as the Bellary-Rayadrug, Hospet-Kottur and Guntakal-Mysore Frontier railways.

Progress in opening—

Sections of railway.	Date of opening.	Miles.	Total.	Grand total.	Remarks.
1	2	3	4	5	6
Main line—					
Frontier to Castle Rock	3-2-88	3·63			
Castle Rock to Deuli	15-6-87	2·75			
Deuli to Dharwar	24-1-87	56·00			
Dharwar to Hospet	1-7-85	101·25			
Hospet to Bellary	24-3-84	40·51			
Bellary to Guntakal*	16-5-87	29·99			
Guntakal to Nandyal	11-7-87	90·25			
Nandyal to Cumbum	15-6-90	63·18			
Cumbum to Tadepalli	3-10-89	122·41			
Tadepalli to Bezwada	...	2·97			
			512·94		
Branches—					
Harihar branch—					
Hubli to Harihar	18-10-86	81·00			
			81·00		
Bijapur branch—					
Gadag to Hotgi	1-8-84	173·08			
			173·08		
Poona branch—					
Londa to Belgaum	21-3-87	31·80			
Belgaum to Miraj	22-12-87	85·88			
Miraj to Koregaon	2-5-87	76·00			
Koregaon to Ghorpuri	18-11-86	83·07			
Ghorpuri to Poona	4-10-90	0·91			
			277·66		
Guntakal-Mysore Frontier branch—					
Guntakal to Dharmavaram	1-3-92	62·95			
Dharmavaram to Hindupur	23-4-93	49·28			
Hindupur to Mysore Frontier	17-7-93	7·27			
			119·50		
Bellary-Rayadrug branch—					
Bellary to Rayadrug	1-7-05	33·35			
			33·35		
Hospet-Kottur branch—					
Hospet to Kottur	1-4-05	43·06			
Ramandruga to Nagalpuram	1-12-06	3·50			
Nagalapuram to Fortwall	24-5-09	2·84			
Fortwall to Kanivihalli	1-10-10	6·79			
			56·19		
Katpadi-Dharmavaram branch—					
Katpadi to Pakala	18-3-91	39·48			
Pakal to Vayalapad	1-1-92	46·69			
Vayalpad to Dharmavaram	20-3-92	94·14			
			180·31		
Pakala-Gudur branch—					
Pakala to Tirupati West	18-3-91	25·05			
Tirupati West to Gudur	15-9-87	59·05			
			84·10		
GRAND TOTAL	...	...	...	1,518·13	

* This section, which was opened throughout in 1871 as a 5′ 6″ gauge branch of the former Madras railway, was made over to the former Southern Mahratta Railway Company on 1st February 1887 and converted to 3′ 3¾″ gauge on the 16th May 1887.

MADRAS AND SOUTHERN MAHRATTA RAILWAY SYSTEM—*contd.*

Madras and Southern Mahratta railway (3′ 3⅜″ gauge)—*concld.*

Details of construction—

Permanent-way.—The rails in use are of 41¼-lb., 50-lb., 60-lb., and 62-lb., flat-footed steel. The sleepers are teak, sal, jamba, pine and Australian eucalyptus and steel trough.

Ballast.—The line is ballasted with stone, gravel, sand and moorum.

Fencing.—The lines from Hospet to Kottur and Bellary to Rayadrug are unfenced, those from Pakala to Dharmavaram and Katpadi to Gudur are fenced only at stations, and the rest are partially fenced.

Curves.—The sharpest curve is of 573 feet radius.

Gradients.—The ruling gradient is 1 in 100, except on the Braganza Ghats (between miles 0 and 3 on the main line) and between Ramandrug and Kanivihalli, where the gradient is 1 in 40, and on the sections between Hospet and Kottur and Bellary and Rayadrug, where it is 1 in 60.

Contracts—

This line forms part of the Madras and Southern Mahratta projected railway within the meaning of the original contract of the 1st June 1882, as supplemented by the principal contract of the 26th June 1908, the main provisions of which are stated under Madras and Southern Mahratta railway (5′ 6″ gauge).

Statistics of working—

INCLUDES THE MADRAS AND SOUTHERN MAHRATTA RAILWAY (5′ 6″ GAUGE).

Year.	Mileage open at end of each year.	Total capital outlay, including suspense, to end of each year, *i.e.*, outlay on (*i*) lines open and (*ii*) lines partly or wholly under construction.	Gross earnings.	Net earnings.	Percentage of net earnings on total capital outlay given in column (3)	Interest.	Annuity.	Company's share of surplus profits (based on terms of contract) *attributable to each year.*	Percentage of Company's share of net earnings, (surplus profits *plus* guaranteed interest on share capital) on Company's capital.	Gain or loss to the State *pertaining to each year.*	Earnings per mile per week.	Proportion of expenses to earnings.
1	2	3	4	5	6	7	8	9	10	11	12	13
	Miles.	Rs.	Rs.	Rs.		Rs.	Rs.	Rs.		Rs.	Rs.	
1908	2,542·85	29,65,72,872	2,82,50,979	97,96,440	3·30	85,17,070	59,81,910	5,84,312	4·28	—52,86,852	214	65·32
1909	2,545·74	30,21,58,743	2,97,72,171	1,19,36,693	3·95	91,55,944	73,25,715	5,58,508	4·24	—31,03,474	225	59·91
1910	2,552·53	30,63,87,664	3,11,30,143	1,30,92,155	4·27	92,69,791	73,25,715	8,19,124	4·59	—43,22,475	235	57·94
1911	2,552·53	31,14,03,239	3,28,29,664	1,41,77,381	4·55	94,61,902	73,25,730	11,05,276	4·97	—37,15,527	247	56·82
1912	2,552·53	31,27,38,275	3,53,32,619	1,61,26,469	5·16	96,17,034	73,25,715	16,42,270	5·69	—24,60,550	266	54·36
1st qr. of 1913.	2,552·53	31,57,83,052	96,56,648	49,61,725	1·57	24,13,007	18,31,425	7,05,069	1·82	+11,384	291	48·62
1913-14	2,552·53	32,04,06,530	3,72,78,171	1,64,35,232	5·13	1,08,91,877	73,25,715	17,59,366	5·85	—26,41,668	281	55·91
1914-15	2,551·33	32,38,92,264	3,73,07,039	1,63,30,824	5·04	1,18,13,624	73,25,715	16,73,507	5·73	—44,82,022	281	56·23
1915-16	2,567·19	32,41,57,972	4,15,37,815	1,96,99,991	6·08	1,10,67,739	73,25,715	26,90,003	7·09	—13,83,466	313	52·57
1916-17	2,567·21	32,61,13,867	4,64,06,975	2,27,72,156	6·98	1,08,72,280	73,25,715	35,72,982	8·26	+10,01,179	348	50·93
1917-18	*2,549·86	32,73,42,751	5,13,54,656	2,74,68,054	8·39	1,12,74,869	73,25,715	†49,07,196	10·04	+39,55,874	380	46·42

* The decrease is due to the dismantling of the Guntur-Tenali branch.

† This sum represents the Company's share of surplus net earnings for the year 1917-18 *minus* the guaranteed interest for the year on the Company's stock capital of £5,000,000. The surplus net earnings for the year 1917-18 were divided between Government and the Company in the proportion of £11,250,000 to £5,000,000 which works out to a ratio of 9 : 4.

Bezwada-Masulipatam railway (3′ 3⅜″ gauge)—

Progress in opening—

Sections of railway.	Date of opening.	Miles.	Total.
1	2	3	4
Bezwada to Masulipatam	4-2-08	49·47	
Masulipatam to Masulipatam Port (Tidal Lock)	1-1-09	2·33	
TOTAL	...	...	51·80

Details of construction—

Permanent-way.—The permanent-way consists of 41¼-lb. flat-footed steel rails on teak sleepers.

Ballast.—The line is ballasted 41 miles with stone and the remainder with sand.

Fencing.—The station yards only are fenced.

Curves.—The radius of the sharpest curve is 717 feet between Masulipatam and Tidal Lock.

Gradients.—The ruling gradient is 1 in 200.

Agreement and contract—

Agreement, dated the 4th February 1908, *between the District Board of Kistna and the Madras and Southern Mahratta Railway Company*, as to maintenance and working, having effect from the 4th February 1908, the date of opening of the Branch.

Contract, dated the 26th June 1908 (called the principal contract), *between the Secretary of State and the Madras and Southern Mahratta Railway Company*, as to the continuance of the existing agreement subject to the variations and modifications thereof as therein set forth.

MADRAS AND SOUTHERN MAHRATTA RAILWAY SYSTEM—*contd.*

Bezwada-Masulipatam railway (3′ 3⅜″ gauge)—*concld.*

Main provisions of agreement and contract—

(i) *Land.*—Provided by the Government free of cost.

(ii) *Government aid.*— } The line (which is the property of the District Board of Kistna) is
(iii) *Terms of working.*— } maintained and worked as an integral part of the Company's system
(iv) *Distribution of profits.*— } by the Madras and Southern Mahratta Railway Company, who provides the rolling-stock and other appliances, etc., necessary thereunto.

For these services the Company is to receive half-yearly 45 per cent of the gross earnings of the Branch the balance, after meeting the cost of new minor works, being handed over to the District Board.

By way of rebate the Company is to pay to the District Board, in respect of and at the end of each year, such a sum not exceeding in any year 10 per cent of the share attributable to the Company's system of the gross earnings from traffic (except stores) interchanged between the Company's system and the Branch railway as shall, together with the net earnings of the Branch for such year, make up an amount equal to interest for the year at the rate of 3½ per cent on the actual expenditure charged in its capital account.

(v) *Rates and fares.*— } The same as from time to time obtain on the Madras and Southern Mahratta railway.
(vi) *Special obligations as to the conveyance of*—
(*a*) Mails, troops, police, high Government officials and Government stores.—
(*b*) Government bullion and coin.—

(vii) *Power of the Government to determine agreement.*—The Government may purchase the Branch line at the expiry of 30 years, or at subsequent periods of 10 years, on twelve months' notice given, at a price 25 times the yearly average net earnings (excluding rebate payments) of three years preceding the purchase, subject to a maximum price of 120 and a minimum of 100 per cent of cost price on a rupee basis.

(viii) *Power of the Government to determine contract.*—As in the case of Madras and Southern Mahratta railway (5′ 6″ gauge).

(ix) *Power of the Kistna District Board to determine agreement.*— } Nil.
(x) *Power of the Kistna District Board to determine contract.*— }

(xi) *Power of the Company to determine agreement.*— } Nil.
(xii) *Power of the Company to surrender contract.*— }

(xiii) *Term of agreement* [*if not determined under* (vii)].—Not specified.

(xiv) *Term of contract* [*if not determined under* (viii)].—As noted under Madras and Southern Mahratta railway (5′ 6″ gauge).

Statistics of working—

Year.	Mileage open at end of each year.	Total capital outlay, including suspense, to end of each year, *i.e.*, outlay on (*i*) lines open and (*ii*) lines partly or wholly under construction.	Gross earnings.	Net earnings.	Percentage of net earnings on total capital outlay given in column (3).	Earnings per mile per week.	Proportion of expenses to earnings.
1	2	3	4	5	6	7	8
	Miles.	Rs.	Rs.	Rs.		Rs.	
1908	49·47	20,02,613	2,72,333	1,49,783	7·48	117	45·00
1909	51·80	21,24,465	3,29,527	1,80,804	8·51	122	45·13
1910	51·80	21,56,748	3,07,417	1,66,821	7·73	114	45·73
1911	51·80	21,82,641	2,89,551	1,57,954	7·24	107	45·45
1912	51·80	21,98,743	3,31,267	1,81,732	8·27	123	45·14
1st qr. of 1913	51·80	21,99,608	94,771	52,124	2·37	141	45·00
1913-14	51·80	22,04,271	3,53,514	1,94,187	8·81	131	45·07
1914-15	51·80	22,03,935	4,06,330	2,23,174	10·13	151	45·08
1915-16	51·80	22,08,193	4,18,796	2,29,699	10·40	155	45·15
1916-17	51·80	22,15,270	3,82,727	2,09,320	9·45	142	45·31
1917-18	51·80	22,28,919	3,71,780	2,03,920	9·15	138	45·15

Birur-Shimoga railway (3′ 3⅜″ gauge)—

Progress in opening—

Section of railway.	Date of opening.	Miles.	Total.
1	2	3	4
Birur to Shimoga	1-12-99	37·92	37·92

Details of construction.

Permanent-way.—The permanent-way consists of 41¼-lb. flat-footed steel rails on Mysore teak sleepers. The Bhadra bridge is laid with 50-lb. flat-footed steel rails.

Ballast.—The line is ballasted throughout with stone and sand.

Fencing.—The line is unfenced except for a very short length.

Curves.—The sharpest curve is of 1,500 feet radius.

Gradients.—The ruling gradient is 1 in 89.

Agreement and contract—

Agreement, dated the 2nd December 1899, *between the Government of His Highness the Maharaja of Mysore and the former Southern Mahratta Railway Company*, as to maintenance and working the Shimoga railway, with effect from 1st December 1899, supplementary to the provisions of the (Mysore) contract of the 31st August 1887, *between the Secretary of State and the former Southern Mahratta Railway Company.*

MADRAS AND SOUTHERN MAHRATTA RAILWAY SYSTEM—*contd.*

Birur-Shimoga railway (3′ 3⅜″ gauge)—*concld.*

Agreement and contract—*concld.*

Contract, dated the 26th June 1908 (called the principal contract), *between the Secretary of State and the Madras and Southern Mahratta Railway Company*, as to the continuance of the existing agreement subject to the variations and modifications thereof as therein set forth.

Main provisions of agreement and contract—

(i) *Land.*—Provided by the Mysore Durbar at the cost of capital.

(ii) *Government aid.*—The line (which is the property of the Mysore Durbar) is maintained, stocked and worked by the Madras and Southern Mahratta Railway Company in all respects (except only as to capital expenditure which is provided by the Durbar) as part of its own undertaking.

(iii) *Terms of working* — } (iv) *Distribution of profits.*— } Maintenance and working expenses are calculated at the same proportion of the gross earnings of the Shimoga railway as (excluding the cost of new minor works attributable to the Mysore State lines and debitable direct to each of those railways to which the works pertain) obtains on the Company's system as a whole, *plus* 5 per cent of the gross earnings of the Shimoga railway for the use of the Company's rolling-stock with effect from 1st July 1908, *plus* the cost of new minor works, in each half-year. And in addition thereto the Company is, as from the 1st July 1908, entitled to $\frac{1}{2}\frac{1}{0}$th of the surplus of the net earnings of the Shimoga railway, after payment thereout of the interest payable on any capital expenditure incurred in respect of that line after the 31st December 1907. The residue is to be paid by the Company to the Durbar.

(v) *Rates and fares.*— } (vi) *Special obligations as to the conveyance of*— (*a*) Mails, troops, police, high Government officials and Government stores.— (*b*) Government bullion and coin.— } The same rates as from time to time obtain on the Madras and Southern Mahratta railway. Except when specially sanctioned by the Government, no terminal charge is to exceed 3 pies per maund leviable only at stations of origin and destination.

(vii) *Power of the Government to determine agreement.*—If not determined by the Durbar or the Company sooner, *vide* (ix) and (xi), then the agreement terminates simultaneously with the principal contract between the Secretary of State and the Company, dated the 26th June 1908.

(viii) *Power of the Government to determine contract.*—As in the case of the Madras and Southern Mahratta railway (5′ 6″ gauge).

(ix) *Power of the Durbar to determine agreement.*—The Durbar may determine the agreement on the 1st January or 1st July in any year after the year 1904 on 12 months' notice given.

(x) *Power of the Durbar to determine contract.*—Nil.

(xi) *Power of the Company to determine agreement.*—As noted under (ix).

(xii) *Power of the Company to determine contract.*—As in the case of the Madras and Southern Mahratta railway (5′ 6″ gauge).

(xiii) *Term of agreement.*—As noted under (vii).

(xiv) *Term of contract.*—As noted under the Madras and Southern Mahratta railway (5′ 6″ gauge).

Statistics of working.—

Included with the Mysore section (Madras and Southern Mahratta) (3′ 3⅜″ gauge).

Dhone-Kurnool railway (3′ 3⅜″ gauge)—

Progress in opening—

Section of railway.	Date of opening.	Miles.	To
1	2	3	4
Dronachellam to Kurnool	1-1-09	32·00	32·00

Details of construction—

Permanent-way.—The permanent-way consists of 41¼-lb. second-hand flat-footed steel rails and old pattern second-hand steel sleepers.

Ballast.—The ballast consists of sand throughout.

Fencing.—The station yards only have been fenced.

Curves.—The sharpest curve is of 1,146 feet radius.

Gradients.—The ruling gradient is 1 in 100.

Agreement—

Dated the 15th September 1911, *between the Secretary of State and the Madras and Southern Mahratta Railway Company*, as to maintenance and working with effect from 1st January 1909.

Main provisions of agreement—

(i) *Land.*—Provided by the Government at the cost of capital.

(ii) *Government aid.*— } (iii) *Terms of working.*— } The line was constructed by the agency of the Madras and Southern Mahratta Railway Company from funds supplied by the Government, whose property it absolutely is and who will provide any land and all moneys that may, at any time, be required for the purposes of capital expenditure on the Dhone-Kurnool railway. Subject to the general control of Government in every respect, the line is maintained, stocked and worked by the Company, for and on behalf of the State, on the following terms and conditions :—

MADRAS AND SOUTHERN MAHRATTA RAILWAY SYSTEM—*contd.*

Dhone-Kurnool railway (3′ 3⅜″ gauge)—*concld.*

Main provisions of agreement—*concld.*

The gross receipts of the Dhone-Kurnool railway are charged with—

(*a*) the actual cost of maintenance of way and works (including revenue new minor works mentioned in clause 18), other than general supervision usually chargeable to Abstract A of the Standard form of Revenue Account prescribed for use on the Company's railway ;

(*b*) a share of the other half-yearly working expenses of the Company's railway system (excluding the cost of Government supervision and control for which no such charge will be levied against the Company in respect of the working of the Branch, but including the cost of general supervision usually chargeable to Abstract A), calculated at the same proportion of the gross receipts of the Branch as obtains on the Company's system, including the Branch, as a whole ;

(*c*) 5 per cent of the gross receipts of the Branch for the use of the Company's rolling-stock ;

(*d*) Rent and maintenance of works, buildings and premises within the limits of Dronachellam Junction station as indicated in clause 12.

(iv) *Distribution of profits.*—After deducting from the gross receipts of the Branch railway the working expenses above mentioned, the balance belongs to the Government.

(v) *Rates and fares.*—
(vi) *Special obligations as to the conveyance of.*—
(*a*) Mails, troops, police, high Government officials and Government stores.—
(*b*) Government bullion and coin.—
} Subject to the same maxima and minima, rules, conditions and arrangements as from time to time obtain on the Madras and Southern Mahratta Railway Company's railways.

(vii) *Power of the Government to determine agreement.*—
(viii) *Power of the Company to determine agreement.*—
} Determinable by either party on the 30th June or 31st December of any year on six months' notice given.

(ix) *Term of agreement.*—Not specified.

Statistics of working—

Year.	Mileage open at end of each year.	Total capital outlay, including suspense, to end of each year, *i.e.*, outlay on (i) lines open and (ii) lines partly or wholly under construction.	Gross earnings.	Net earnings.	Percentage of net earnings on total capital outlay given in column (3).	Interest.	Gain or loss to the State *pertaining to each year.*	Earnings per mile per week.	Proportion of expenses to earnings.
1	2	3	4	5	6	7	8	9	10
	Miles.	Rs.	Rs.	Rs.		Rs.	Rs.	Rs.	
1909 . .	32·00	9,25,342	1,29,768	47,128	5·09	28,239	+18,889	78	63·68
1910 . .	32·00	9,50,923	99,240	33,653	3·54	31,918	+1,735	60	66·09
1911 . .	32·00	9,74,171	1,10,927	29,077	2·98	32,650	—3,573	67	73·79
1912 . .	32·00	10,05,422	1,18,005	39,279	3·91	34,147	+5,132	71	66·71
1st qr. of 1913.	32·00	10,06,675	34,179	13,696	1·36	8,554	+5,142	82	59·93
1913-14 .	32·00	10,08,750	1,23,739	44,872	4·45	34,914	+9,958	74	63·74
1914-15 .	32·00	10,07,689	1,12,693	40,775	4·05	35,280	+5,495	68	63·82
1915-16 .	32·00	10,08,669	1,31,028	53,435	5·30	35,009	+18,426	79	59·22
1916-17 .	32·00	10,16,599	1,40,000	55,218	5·43	33,381	+21,837	84	60·56
1917-18 .	32·00	10,18,342	1,20,216	46,894	4·60	35,336	+11,558	72	60·99

Hindupur (Yesvantpur-Mysore Frontier) railway (3′ 3⅜″ gauge)—

Progress in opening—

Sections of railway.	Date of opening.	Miles.	Total.	Remarks.
1	2	3	4	5
Yesvantpur to Dodballapur. . . .	15-12-92	* 19·93		*Of this 6·85 miles, between Yesvantpur and Yelahanka, are on a mixed (3 '3⅜" and 2′ 6″) gauge.
Dodballapur to Mysore Frontier . . .	17-9-93	31·42		
TOTAL .	...	...	51·35	

Details of construction—

Permanent-way.—The rails on the ghât section are 50-lb. flat-footed steel, State railway type, and 41¼-lb. flat-footed steel on the remainder of the line. The sleepers are Mysore teak throughout.

Ballast.—The line is ballasted throughout with stone.

Fencing.—The line is fenced throughout.

Curves.—The sharpest curve has a radius of 660 feet.

Gradients.—The ruling gradient is 1 in 100 with a 1 in 89 gradient on the ghât section.

Agreement and contract—

Agreement, dated the 2nd December 1899, *between the Government of His Highness the Maharaja of Mysore and the former Southern Mahratta Railway Company,* having effect from 17th September 1893, supplementary to the provisions of the (Mysore) contract of the 31st August 1887, *between the Secretary of State and the former Southern Mahratta Railway Company,* noted under Madras and Southern Mahratta railway (5′ 6″ gauge).

Contract, dated the 26th June 1908 (called the principal contract), *between the Secretary of State and the Madras and Southern Mahratta Railway Company,* as to the continuance of the existing agreement subject to the variations and modifications thereof as therein set forth.

Main provisions of agreement and contract—

As noted under the Birur-Shimoga railway.

Statistics of working—

Included with the Mysore Section (Madras and Southern Mahratta).

MADRAS AND SOUTHERN MAHRATTA RAILWAY SYSTEM—*contd.*

Kolhapur State railway (3′ 3⅜″ gauge)—

Progress in opening—

Section of railway.	Date of opening.	Miles.	Total.
1	2	3	4
Kolhapur to Miraj	21-4-91	29·27	29·27

Details of construction—

Permanent-way.—The permanent-way consists of 41¼-lb. flat-footed steel rails on steel trough sleepers.
Ballast.—The line is ballasted throughout with gravel and sand.
Fencing.—The line is unfenced except for a very short length.
Curves.—There are no curves with a radius of less than 1,000 feet.
Gradient.—The ruling gradient is 1 in 100.

Agreement and contract—

Agreement, dated the 17th July 1891, *between the Kolhapur Durbar and the old Southern Mahratta Railway Company*, as to maintenance and working, having effect from 21st April 1891.
Contract, dated the 26th June 1908 (called the principal contract), *between the Secretary of State and the Madras and Southern Mahratta Railway Company*, as to the continuance of the existing agreement, subject to the variations and modifications thereof as therein set forth.

Main provisions of agreement and contract—

(i) *Land.*—Provided by the Kolhapur Durbar at the cost of capital.
(ii) *Government aid.*—The line is the property of, and was constructed by, the Kolhapur Durbar, who supply funds for any necessary additions thereto. It is maintained, stocked and worked by the Madras and Southern Mahratta Railway Company.
(iii) *Terms of working.*— } From the total expenses of maintaining and working the Company's
(iv) *Distribution of profits.*— } system, including the Kolhapur State railway, as a whole, are deducted charges for new minor works and Government supervision debitable direct to each of the railways concerned, and the balance is divided between the two railways in the ratio of the gross earnings of each.

From the gross earnings of the Kolhapur State railway are then deducted the charges for new minor works and the proportion of working expenses attributable to that line as noted above, and the remainder, representing its net earnings, is paid half-yearly to the Durbar.

(v) *Rates and fares.*— }
(vi) *Special obligations as to the conveyance of.*— } The same as, for the time being, are in force
(a) Mails, troops, police, high Government officials and Government stores.— } on the Madras and Southern Mahratta railway.
(b) Government bullion and coin.— }
(vii) *Power of the Government to determine agreement.*—Not specified.
(viii) *Power of the Durbar to determine agreement.*— } The agreement is terminable upon 6 months'
(ix) *Power of the Company to determine agreement.*— } notice from either party to the agreement.
(x) *Power of the Government to determine contract.*— } As in the case of the Madras and Southern
(xi) *Power of the Company to determine contract.*— } Mahratta railway (5′ 6″ gauge).
(xii) *Power of the Durbar to determine contract.*—Nil.
(xiii) *Term of agreement.*—As against (viii) and (ix).
(xiv) *Term of contract.*—As noted under the Madras and Southern Mahratta railway (5′ 6″ gauge).

Statistics of working (Those for the periods prior to 1908 will be found in Appendix 38 to the Railway Administration Report for 1907.)—

Year.	Mileage open at end of each year.	Total capital outlay, including suspense, to end of each year, *i.e.*, outlay on (i) lines open and (ii) lines partly or wholly under construction.	Gross earnings.	Net earnings.	Percentage of net earnings on total capital outlay given in column (3).	Earnings per mile per week.	Proportion of expenses to earnings.
1	2	3	4	5	6	7	8
	Miles.	Rs.	Rs.	Rs.		Rs.	
1908 . . .	29·27	23,26,251	2,22,260	88,154	3·79	146	60·34
1909 . . .	29·27	23,26,251	2,26,772	91,612	3·94	149	59·60
1910 . . .	29·27	23,26,251	2,53,956	1,10,093	4·73	167	56·65
1911 . . .	29·27	23,26,251	2,79,662	1,23,393	5·30	184	55·88
1912 . . .	29·27	23,26,251	3,17,453	1,47,272	6·33	209	53·61
1st qr. of 1913 .	29·27	23,26,251	1,04,973	54,628	2·35	276	47·96
1913-14 . . .	29·27	23,26,251	3,41,236	1,53,844	6·61	224	54·92
1914-15 . . .	29·27	23,26,251	3,10,588	1,38,449	5·95	204	55·42
1915-16 . . .	29·27	23,26,251	3,24,162	1,56,228	6·72	213	51·81
1916-17 . . .	29·27	23,26,251	3,27,117	1,62,122	6·97	215	50·44
1917-18 . . .	29·27	23,26,251	3,64,304	1,96,042	8·43	239	46·19

MADRAS AND SOUTHERN MAHRATTA RAILWAY SYSTEM—*contd.*

Mysore-Nanjangud railway (3′ 3⅜″ gauge)—

Progress in opening—

Sections of railway.	Date of opening.	Miles.	Total.
1	2	3	4
Mysore to Nanjangud	1-12-91	15·04	
Nanjangud to Nanjangud town	12-7-99	0·76	
TOTAL	...	...	15·80

Details of construction—

Permanent-way.—The permanent-way consists of 41¼-lb. flat-footed steel rails, mostly on Mysore teak with a mixture of jamba sleepers.

Ballast.—The line is ballasted throughout with stone and sand.

Fencing.—The line is partially fenced.

Curves.—The sharpest curve has a radius of 700 feet.

Gradients.—The ruling gradient is 1 in 89.

Agreement and contract—

Agreement, dated the 14th December 1899, *between the Government of His Highness the Maharaja of Mysore and the former Southern Mahratta Railway Company*, as to the maintenance and working of the Nanjangud railway, having effect from the 1st December 1891, supplementary to the provisions of the (Mysore) contract of the 31st August 1887, *between the Secretary of State and the former Southern Mahratta Railway Company.*

Contract, dated the 26th June 1908 (called the principal contract), *between the Secretary of State and the Madras and Southern Mahratta Railway Company*, as to the continuance of the existing agreement subject to the variations and modifications thereof as therein set forth.

Main provisions of agreement and contract—

As noted under the Birur-Shimoga railway (3′ 3⅜″ gauge), with the following exception, *viz.*,—

Power of the Durbar to determine agreement.—On the 1st January or 1st July in any year on 6 months' notice being given.

Statistics of working—

Included with the Mysore Section (Madras and Southern Mahratta).

Mysore Section (Madras and Southern Mahratta.) (3′ 3⅜″ gauge.)

Progress in opening—

Sections of railway.	Date of opening.	Miles.	Total.
1	2	3	4
Mysore to Mandya	25-2-82	27·97	
Mandya to Channapatna	20-3-81	23·81	
Channapatna to Bangalore	1-2-81	34·75	
Bangalore to Tumkur	11-8-84	43·00	
Tumkur to Gubbi	26-12-84	11·00	
Gubbi to Birur	12-8-89	76·57	
Birur to Harihar	21-2-89	79·68	
TOTAL	...	...	296·28

Details of construction—

Permanent-way.—The permanent-way consists of 41¼-lb. and 60-lb. flat-footed steel rails, with the exception of about 2·75 miles which are laid with iron rails. The rails are laid on Mysore teak sleepers with a small proportion of jamba and steel trough sleepers.

Ballast.—The line is ballasted throughout with stone and sand.

Fencing.—The line is only partially fenced.

Curves.—The sharpest curve has a radius of 660 feet.

Gradients.—The ruling gradient is 1 in 100 between Harihar and Bangalore, and 1 in 70 between Bangalore and Mysore.

Contracts—

Dated the 31st August 1887, *between the Secretary of State and the former Southern Mahratta Railway Company*, as to the construction, maintenance and working of the Mysore State railway.

Dated the 26th June 1908 (called the principal contract), *between the Secretary of State and the Madras and Southern Mahratta Railway Company*, as to the continuance of the existing contract subject to the variations and modifications thereof as therein set forth.

Main provisions of contracts—

(i) *Land.*—Provided by the Government on behalf of the Mysore Durbar at the cost of capital.

(ii) *Government aid.*—The railway, which (as between the Government and the Company, and without prejudice to any arrangements between the former and the Mysore Durbar) is declared to be absolutely the property of the Government, was constructed and equipped with rolling-stock and all other appliances necessary thereunto, and is maintained and worked by the Madras and Southern Mahratta Railway Company, on behalf of the Government. All funds for capital expenditure are provided by the Durbar, under capital expenditure being included the cost of stores.

Government guarantee interest in sterling, payable half-yearly on the 1st April and 1st October, at the rate of 4 per cent per annum on the sum of £1,200,000, the nominal amount of debenture stock issued by the Company.

MADRAS AND SOUTHERN MAHRATTA RAILWAY SYSTEM—*contd.*

Mysore section (Madras and Southern Mahratta) (3′ 3⅜″ gauge)—*concld.*

Main provisions of contracts—*concld.*

(iii) *Terms of working.*—
(iv) *Distribution of profits.*—

From the joint working expenses of the entire system are first deducted certain "direct" charges, *viz.*, on account of new minor works, Government supervision and control, payment for use of rolling-stock and for use of joint stations; these "direct" charges being payable in their entirety by the railways incurring them. The balance of the joint working expenses is then divided as between the whole system and the Mysore section in proportion to gross earnings of each. The share of the Mysore section thus arrived at, added to the "direct" charges incurred on that section, form the working expenses of the Mysore section.

The gross receipts attributable to the Mysore section are applied—

(*a*) in discharge of the working expenses arrived at as above, and

(*b*) in payment of interest at 4 per cent on capital expenditure incurred on the section since 31st December 1907;

(*c*) the surplus being divided between the Government (on behalf of the Durbar) and the Company in the proportion of 19/20 and 1/20, respectively.

(v) *Rates and fares.*—
(vi) *Special obligations as to the conveyance of*—
(*a*) Mails, troops, police, high Government officials and Government stores—
(*b*) Government bullion and coin—
(vii) *Power of the Government to determine contract.*—
(viii) *Power of the Company to determine contract.*—
(ix) *Term of contract.*—

As in the case of the Madras and Southern Mahratta railway (5′ 6″ gauge).

Statistics of working (Those for the periods prior to 1887 will be found in Appendix 38 to the Railway Administration Report for 1907.)—

Includes the Birur-Shimoga, Hindupur (Yesvantpur-Mysore Frontier) and Mysore-Nanjangud railways from 1908.

Year.	Mileage open at end of each year.	Total capital outlay, including suspense, to end of each year, *i.e.*, outlay on (*i*) lines open and (*ii*) lines partly or wholly under construction.	Gross earnings.	Net earnings.	Percentage of net earnings on total capital outlay given in column (3).	Interest.	Company's share of surplus profits (based on terms of contract) *attributable to each year.*	Gain or loss to the State *pertaining to each year.*	Earnings per mile per week.	Proportion of expenses to earnings.
1	2	3	4	5	6	7	8	9	10	11
	Miles.	Rs.	Rs.	Rs.		Rs.	Rs.	Rs.	Rs.	
1887	139·75	91,36,138	5,13,259	1,40,723	1·54	6,70,864	35,018	—5,65,159	71	72·58
1888	139·75	1,25,76,692	5,70,657	1,34,031	1·07	6,94,210	33,607	—5,93,786	79	76·51
1889	290·00	1,44,24,093	8,96,273	2,19,813	1·52	7,07,500	54,991	—5,42,678	72	75·47
1890	296·00	1,47,11,610	11,86,318	2,59,084	1·76	6,48,783	64,772	—4,54,421	77	78·16
1891	296·00	1,50,76,285	13,24,525	4,39,280	2·91	6,54,850	1,09,760	—3,25,330	86	66·83
1892	296·00	1,46,36,205	13,99,463	4,43,427	3·03	7,29,624	1,10,863	—3,97,060	91	68·31
1893	296·00	1,46,42,217	16,83,203	6,74,562	4·61	7,70,439	1,68,171	—2,64,048	109	59·92
1894	296·00	1,47,60,293	14,45,412	4,77,149	3·23	8,38,525	1,19,039	—4,80,415	94	66·99
1895	296·00	1,49,22,452	15,78,231	6,29,385	4·22	8,70,947	1,56,931	—3,98,493	103	60·12
1896	296·00	1,51,08,257	15,84,981	6,76,976	4·48	8,21,588	1,69,189	—3,13,801	103	57·29
1897	296·00	1,51,99,757	18,80,019	7,98,285	5·25	7,75,708	2,00,031	—1,77,454	122	57·54
1898	296·00	1,55,07,319	13,92,851	4,13,421	2·67	7,38,461	1,02,680	—4,27,720	90	70·32
1899	296·00	1,56,75,416	10,60,469	3,29,033	2·10	7,21,117	82,076	—4,74,160	69	68·97
1900	296·00	1,58,70,510	13,76,391	4,71,201	2·97	7,18,200	1,18,888	—3,65,887	89	65·77
1901	296·36	1,60,14,879	14,33,240	4,07,791	2·55	7,22,244	1,01,860	—4,16,313	93	71·55
1902	296·22	1,60,76,009	15,97,046	5,58,082	3·47	7,21,062	1,39,538	—3,02,518	104	65·06
1903	296·22	1,62,34,903	15,35,270	5,82,298	3·59	7,20,000	1,46,012	—2,83,714	100	62·07
1904	296·22	1,62,59,794	15,85,324	5,63,667	3·47	7,20,000	1,40,940	—2,97,273	103	64·44
1905	296·22	1,64,78,981	17,90,901	6,98,051	4·24	7,20,000	1,73,883	—1,95,832	116	61·02
1906	296·22	1,65,59,502	18,48,348	7,19,072	4·34	7,20,000	1,79,500	—1,80,428	120	61·10
1907	296·22	1,70,31,855	21,57,636	8,44,427	4·96	7,20,000	2,11,472	—87,045	140	60·86
1908	401·29	2,29,75,788	30,71,949	11,66,353	5·08	8,64,949	1,51,026	+1,50,378	147	62·03
1909	401·29	2,32,36,445	26,71,013	10,67,326	4·59	10,43,593	55,389	—31,656	128	60·04
1910	401·29	2,35,17,190	28,00,896	11,28,684	4·80	10,48,897	57,763	+22,024	134	59·70
1911	401·29	2,36,85,396	28,55,654	12,07,863	5·10	10,60,843	61,457	+85,563	137	57·70
1912	401·29	2,37,80,303	33,53,931	14,93,756	6·28	10,63,291	75,262	+3,55,203	161	55·46
1st qr. of 1913.	401·29	2,40,63,067	9,40,540	4,75,274	1·98	2,67,455	24,132	+1,83,687	180	49·47
1913-14	401·35	2,43,70,036	36,51,923	15,89,726	6·52	10,75,537	79,836	+4,34,333	175	56·47
1914-15	401·35	2,42,44,450	34,77,899	14,82,838	6·12	10,83,776	73,981	+3,25,081	167	57·37
1915-16	401·35	2,43,43,685	35,94,259	16,67,478	6·85	10,86,828	83,396	+4,97,254	172	53·61
1916-17	401·35	2,44,88,478	38,16,213	18,27,236	7·46	10,88,546	90,018	+6,48,672	183	52·12
1917-18	401.35	2,47,22,416	39,75,988	20,76,203	8·40	10,97,276	1,04,691	+8,74,236	191	47·78

Sangli State railway (3′ 3⅜″ gauge)—

Progress in opening—

Section of railway.	Date of opening.	Miles.	Total.
1	2	3	4
Miraj Junction to Sangli	1-4-07	4·90	4·90

MADRAS AND SOUTHERN MAHRATTA RAILWAY SYSTEM—*contd.*

Sangli State railway.—(3′ 3⅜″ gauge)—*concld.*

Details of construction—

Permanent-way.—The permanent-way consists of second-hand 41¼-lb. flat-footed steel rails on teak sleepers.

Ballast.—Ballast is chiefly moorum.

Fencing.—The line is not fully fenced, but only where necessary.

Curves.—The sharpest curve has a radius of 1,011 feet.

Gradients.—The ruling gradient is 1 in 80.

Agreements and contract—

Agreement, dated the 17th July 1907, *between the Sangli Durbar and the former Southern Mahratta Railway Company*, as to the construction of the Sangli State railway.

Agreement, dated the 17th July 1907, *between the Sangli Durbar and the former Southern Mahratta Railway Company*, as to the maintenance and working of the Sangli State railway.

Contract, dated the 26th June 1908 (called the principal contract), *between the Secretary of State and the Madras and Southern Mahratta Railway Company*, as to the continuance of the existing agreements subject to the variations and modifications thereof as therein set forth.

Main provisions of agreements and contract—

(i) *Land.*—Provided by the Sangli Durbar free of cost.

(ii) *Government aid.*—The Sangli State railway was constructed by the former Southern Mahratta Railway Company from funds supplied by the Durbar, whose property it is and who will provide all further funds that may be necessary for new works chargeable to Capital. The Branch is maintained, stocked and worked by the Company.

(iii) *Terms of working.*—
(iv) *Distribution of profits.*— } From the total expenses of maintaining and working the Company's system, including the Sangli State railway, as a whole, are deducted charges for new minor works and Government supervision debitable direct to each of the railways concerned, and the balance is divided between the two railways in the ratio of the gross earnings of each.

From the gross earnings of the Sangli State railway are then deducted the charges for new minor works and the proportion of working expenses attributable to the Branch as noted above, and the remainder, representing its net earnings, is paid half yearly to the Durbar.

(v) *Rates and fares.*—
(vi) *Special obligations as to the conveyance of*—
(*a*) Mails, troops, police, high Government officials and Government stores.—
(*b*) Government bullion and coin.— } The same as, for the time being, are in force on the Madras and Southern Mahratta railway.

(vii) *Power of the Government to determine agreement.*—Not specified.

(viii) *Power of the Durbar to determine agreement.*—
(ix) *Power of the Company to determine agreement.*— } The agreement is terminable at the end of any year upon 6 months' notice from either party to the agreement.

(x) *Term of agreement.*—As against (viii) and (ix).

Statistics of working—

Year.	Mileage open at end of each year.	Total capital outlay, including suspense, to end of each year, *i.e.*, outlay on (*i*) lines open and (*ii*) lines partly or wholly under construction.	Gross earnings.	Net earnings.	Percentage of net earnings on total capital outlay given in column (3).	Earnings per mile per week.	Proportion of expenses to earnings.
1	2	3	4	5	6	7	8
	Miles.	Rs.	Rs.	Rs.		Rs.	
1908 . . .	4·90	1,66,382	33,321	13,402	8·05	131	59·78
1909 . . .	4·90	1,69,903	40,763	15,712	9·25	160	61·43
1910 . . .	4·90	1,75,091	43,136	18,176	10 38	169	57·86
1911 . . .	4·90	1,77,254	43,863	19,276	10·87	172	56·05
1912 . . .	4·90	1,77,787	39,197	18,124	10·19	154	53·76
1st qr. of 1913 .	4·90	1,77,787	10,915	5,680	3·19	171	47·96
1913-14 . .	4·90	1,77,787	39,860	17,956	10·10	156	54·95
1914-15 . .	4·90	1,77,787	38,358	16,930	9·52	151	55·86
1915-16 . .	4·90	1,77,787	42,265	20,379	11·46	166	55·78
1916-17 . .	4·90	1,77,787	44,877	22,012	12·38	176	50·95
1917-18 . .	4·90	1,82,649	49,281	25,019	13·70	193	49·18

West of India Portuguese railway (3′ 3⅜″ gauge)—

Chairman.—Ernest B. Sawyer, Esq., M.A.

Secretary.—George K. Wasey, Esq.

Offices.—4, Coleman Street, London, E.C.

The line was constructed with the object of connecting the British and Portuguese territories and of affording the Southern Mahratta country a harbour on the West Coast. The Southern Mahratta railway took over the working of the line as from the 1st July 1902.

Progress in opening—

Sections of railway.	Date of opening	Miles.	Total.
1	2	3	4
Mormugao Harbour to Sonaulim	17-1-87	41·00	
Sonaulim to the Portuguese frontier	3-2-88	10·10	
TOTAL . .	...	...	51·10

MADRAS AND SOUTHERN MAHRATTA RAILWAY SYSTEM—*contd.*

West of India Portuguese railway (3′ 3⅜″ gauge)—*contd.*

Details of construction—

Permanent-way.—The permanent-way consists of 60-lb. and 62-lb. flat-footed steel rails on creosoted pine, sâl, teak and jamba sleepers.

Ballast.—The line is ballasted throughout with laterite and blue stone.

Fencing.—The line is partially fenced.

Curves.—The sharpest curve is of 720 feet radius.

Gradients.—The ruling gradient is 1 in 100 with a 1 in 40 on the Ghat section.

Contracts and agreement—

Contract, dated the 18th April 1881, *between the Portuguese Government and the West of India Portuguese Railway Company*, as to the construction of a harbour at the Port of Mormugao and a railway from Mormugao to the Portuguese Frontier.

Contract, dated the 19th December 1892, *between the Portuguese Government and the West of India Portuguese Railway Company*, providing for the guarantee of interest on the Company's capital in consequence of the cessation of the annual subsidy of Rs. 4,00,000, which was formerly paid by the British to the Portuguese Government and hypothecated by the latter to the Company.

Agreement, dated the 21st August 1902, *between the former Southern Mahratta Railway Company and the West of India Portuguese Railway Company*, as to the maintenance and working of the railway from Mormugao to the Portuguese Frontier and the harbour at the Port of Mormugao.

Contract, dated the 26th June 1908 (called the principal contract), *between the Secretary of State and the Madras and Southern Mahratta Railway Company*, as to the continuance of the existing contracts and agreement, subject to the variations and modifications thereof as therein set forth.

Main provisions of contracts and agreement—

(i) *Land.*—Provided by the Portuguese Government free of cost to the West of India Portuguese Railway Company.

(ii) *Government aid.*—Guarantee by the Portuguese Government of interest in sterling at 5 per cent per annum on £800,000, and at 6 per cent per annum on any additional capital. The interest is secured (*a*) on any annual subsidy payable by the British or the British Indian Government to the Portuguese Government, and (*b*) on the Abkari (excise) duties levied in Goa. Any deficiency is, however, to be made up by the Portuguese Government from other sources.

The line, which is the property of the West of India Portuguese Railway Company, is maintained and worked by the Madras and Southern Mahratta Railway Company as part of the latter's undertaking, except as to further capital expenditure which is provided by the Portuguese Government.

(iii) *Terms of working.*— } *As between the Madras and Southern Mahratta and West of India Portu-*
(iv) *Distribution of profits.*— } *guese Railway Companies.*—*Railway* revenue expenses are in the first instance paid by the Madras and Southern Mahratta Railway Company. Separate half-yearly accounts are kept of the gross earnings respectively of the Madras and Southern Mahratta railway and the West of India Portuguese railway. The gross working expenses of the combined railways (excluding revenue expenditure on new minor works which is borne entirely by the railway—whether the Madras and Southern Mahratta or the West of India Portuguese—incurring it and is in either or both cases excluded from the joint working expenses, and interest payable by the Madras and Southern Mahratta Railway Company on the capital cost of telegraph lines equipped and owned by the Government of India) are borne by the two Companies in the proportion of their respective gross earnings for each half-year.

As to *Harbour* receipts and expenses, a separate account is kept of all sources of revenue at the Port of Mormugao. The amount chargeable by the Madras and Southern Mahratta Railway Company for maintenance and working is actuals, *plus* 10 per cent thereon for superior supervision, subject to the proviso that if in the aggregate they (without the sanction of the West of India Portuguese railway) exceed the mean of the figures which represent the relation of such expenditure to receipts during the years 1895, 1896 and 1899, any such excess is to be annulled, or reduced as much as possible by a corresponding diminution in the charge for supervision.

The profits arising from the West of India Portuguese railway, being the excess of earnings over working expenses so calculated, are to be paid half-yearly by the Madras and Southern Mahratta Railway Company to the West of India Portuguese railway.

NOTE.—At the desire of the Board of the West of India Portuguese Railway the Secretary of State has agreed to 80 per cent of the net earnings of each month being paid to the Joint Representative in India as soon as the accounts of each month are completed. (India Office letter No. P.W.-2962, dated the 27th December 1912).

(v) *Distribution of profits as between the Portuguese Government and the West of India Portuguese Railway Company.*—The surplus profits in any year, after payment of the guaranteed interest for that year, are to be divided equally between the Portuguese Government and the West of India Portuguese Railway Company.

(vi) *Rates and fares.*—The maximum rates and fares to be fixed with the consent of the Portuguese Government, and not to exceed the maxima on the Great Indian Peninsula railway; they are also subject to the maxima and minima prescribed in the contracts between the Secretary of State for India and the Madras and Southern Mahratta Railway Company.

(vii) *Special obligations as to the conveyance of—*

(*a*) Mails, both British and Portuguese.—To be conveyed on the West of India Portuguese railway upon the terms of the Treaty of 1878.

(*b*) Portuguese Government troops, officials, and Government stores.—To be conveyed on the West of India Portuguese railway on the same conditions as on Indian State railways.

MADRAS AND SOUTHERN MAHRATTA RAILWAY SYSTEM—*contd.*

West of India Portuguese railway (3′ 3⅜″gauge)—*concld.*

Main provisions of contracts and agreement—*concld.*

(viii) *Power of the Portuguese Government to determine contract.*—The Portuguese Government may purchase the railway and all other works—

(*a*) at any time by giving six months' notice;

(*b*) at any time after the expiration of the first 30 years from the date of opening of the railway or any section thereof, by giving two years' notice.

In the first case the Portuguese Government must pay to the Company in London a sum in sterling not less than the amount actually expended by the Company on the railway and other works, with 10 per cent added, and the value of the rolling-stock, machinery, station appliances and stores.

In the second case the price to be paid by the Portuguese Government is a sum in sterling equal to the amount of the value of all the shares, debentures and stock of the Company calculated according to the mean market value in London during the three years immediately preceding the expiration of the two years' notice (such sum not to be less than the amount actually expended by the Company on the railway and other works), *plus* the value of the rolling-stock, machinery, station appliances and stores.

At the expiration of the term of the contract [99 years, see (xii),] the line becomes the property of the Portuguese Government, but the rolling-stock, machinery, station appliances and stores, and any other movable property or plant, have to be paid for at their fair value.

(ix) *Power of the West of India Portuguese Railway Company to surrender contract.*—The West of India Portuguese Railway Company may make over the railway and works to the Portuguese Government—

(*a*) in the event of failure on the part of the Portuguese Government to pay the guaranteed interest in full, by giving six months' notice;

(*b*) at any time after the expiration of the first 30 years from the date of opening of any section of the line without renewal of the Treaty of 1878, by giving two years' notice.

In the first case the West of India Portuguese Railway Company would be entitled to receive from the Portuguese Government, in sterling, the amount actually expended on the railway and works, with 10 per cent added, and the value of the rolling-stock, machinery, station appliances and stores: in the second case, the same amount, less the additional 10 per cent on the expenditure on the railway and works.

(x) *Power of the Madras and Southern Mahratta Railway Company to determine agreement.*—
(xi) *Power of the West of India Portuguese Railway Company to determine agreement.*— } Determinable by either party at the end of two years from the 1st July 1902 (the date on which it came into force) on 6 months' notice given, reckoned either from the 30th June or the 31st December next after the delivery of such notice.

Upon the determination of the agreement the Madras and Southern Mahratta Railway Company to surrender to the West of India Portuguese Railway Company the railway and harbour and their equipment, etc., and to pay to the latter all money held on account of the railway.

(xii) *Term of contract* [*if not determined under* (ix), (x) *or* (xi)].—99 years from the date of opening of the line.

(xiii) *Term of agreement* [*if not determined under* (x), *or* (xi)].—The term of agreement is 5 years, unless extended* with the consent of both parties, when the West of India Portuguese Railway Company have the right to resume the working of their line and harbour.

* Since extended to 30th June 1922, *vide* Despatch from the Secretary of State No. 17 Railway, dated the 4th May 1917.

Statistics of working (Those for the periods prior to 1908 will be found in Appendix 38 to the Railway Administration Report for 1907.)—

Includes the Harbour works.

Year.	Mileage open at end of each year.	Total capital outlay, including suspense, to end of each year, *i.e.*, outlay on (i) lines open and (ii) lines partly or wholly under construction.	Gross earnings.	Net earnings.	Percentage of net earnings on total capital outlay given in column (3).	Earnings per mile per week.	Proportion of expenses to earnings.
1	2	3	4	5	6	7	8
	Miles.	Rs.	Rs.	Rs.		Rs.	
1908 . .	51·10	1,70,71,439	10,64,804	3,92,394	2·30	401	63·15
1909 . .	51·10	1,75,93,058	9,60,235	3,75,092	2·13	361	60·93
1910 . .	51·10	1,76,70,672	12,64,030	5,42,226	3·07	476	57·10
1911 . .	51·10	1,77,41,327	12,20,715	5,33,068	3·00	459	56·35
1912 . .	51·10	1,83,24,990	9,91,479	4,12,657	2·25	374	58·38
1st qr. of 1913.	51·10	1,84,16,306	2,93,648	1,20,147	0·65	442	59·08
1913-14 . .	51·10	1,87,62,134	11,76,901	5,24,123	2·84	443	55·47
1914-15 . .	51·10	1,90,86,222	8,51,382	3,47,839	1·82	321	59·14
1915-16 . .	51·10	1,93,40,101	7,94,409	3,28,905	1·69	299	58·59
1916-17 . .	51·10	1,94,72,673	8,24,195	2,95,456	1·51	310	64·15
1917-18 . .	51.10	*1,94,46,771	7,71,769	2,88,314	1·48	290	62·64

* Original capital up to 31st December 1901, £1,349,058-2-5 @ 1*s.* 8*d.* per rupee = ... Rs. 1,61,88,697
Expenditure by Portuguese Government on Improvements of line and harbour up to 31st March 1913. ... 32,58,074
Total ... **1,94,46,771**

MADRAS AND SOUTHERN MAHRATTA RAILWAY SYSTEM—*concld.*

Alnavar-Dandeli railway (3′ $3\frac{3}{8}$″ **gauge**)—

The construction of this line by the Madras and Southern Mahratta Railway Company from funds provided by the State was sanctioned in Railway Board's Notification No 825 P-16, dated the 31st January 1918.

Progress in opening.—

Section of railway.	Date of opening.	Miles.	Total.
1	2	3	4
Alnavar to Dandeli (sanctioned on 31st January 1918)	...	19·12	19·12

NIZAM'S GUARANTEED STATE RAILWAYS SYSTEM.—

Chairman—Charles Albert Winter, Esq.

Secretary—M. T. Walker, Esq.

Offices—Winchester House, 50, Old Broad Street, London, E.C.

Date of registration of the Company—24th December 1883.

Lines comprised in the system.—The Nizam's Guaranteed State railways system is made up of—

	Open line.	Under construction or sanctioned for construction.	Total.
	Miles.	Miles.	Miles.
(*a*) Nizam's Guaranteed State railway (5′ 6″ gauge)	330·13	...	330·13
(*b*) Bezwada Extension railway (5′ 6″ gauge)	21·47	...	21·47
(*c*) Hingoli Branch railway (3′ 3⅜″ gauge)	50·31	...	50·31
(*d*) Hyderabad-Godavari Valley railway (3′ 3⅜″ gauge)	391·13	...	391·13
(*e*) Secunderabad-Gadwal railway (3′ 3⅜″ gauge)	103·30	13·45	116·75
Total	896·34	13·45	909·79

Nizam's Guaranteed State railway (5′ 6″ gauge)—

Up to the end of 1878 the line was worked by the Great Indian Peninsula Railway Company with its own rolling-stock. From January 1879 to the 31st December 1884 it was worked by State Railway agency, and from January 1885 by the Nizam's Guaranteed State Railways Company.

Progress in opening—

Sections of railway.	Date of opening.	Miles.	Total.	Grand total.	Remarks.
1	2	3	4	5	6
Main line—					
Wadi junction to Secunderabad	9-10-74	115·45*			* Of this 5·86 miles, Secunderabad to Hyderabad, are of mixed (5′ 6″ and 3′ 3⅜″) gauge.
Secunderabad to Warangal	8-4-86	86·66			
Warangal to Dornakal	1-1-88	52·66			
Dornakal to Bona Kalu	5-8-88	31·99			
Bona Kalu to the British frontier	10-2-89	23·54			
			310·30		
Branches—					
Hyderabad branch—					
Husain Sagar to Hyderabad	9-10-74	3·57			
			3·57		
Mineral branch—					
Dornakal to Singareni Coal-fields	1-1-88	16·26			
			16·26		
TOTAL	...	...	...	330·13	

Details of construction—

Permanent-way.—The first 47 miles from Wadi are laid with 75-lb. bull-headed steel rails, 42 miles being on cast iron pot sleepers and the remaining 5 miles on cast iron chairs and jarrah sleepers. The next 9 miles are laid with 85-lb. flat-footed steel rails on steel sleepers and the following 56 miles with 85-lb. flat-footed rails on jarrah sleepers. The section between Begampet and mile 260-9½ is laid with 85-lb. flat-footed steel rails on steel sleepers, with the exception of the mixed (5′ 6″ and 3′ 3⅜″) gauge line, from Secunderabad to Hyderabad, which has wooden sleepers under the same section of rail. Miles 260-9½ to 306 are laid with 66¼ lbs. rails and steel peapod sleepers, and miles 306 to the British frontier, with jarrah sleepers under the same section of rail.

Ballast.—The line is ballasted throughout with stone and sand.

Fencing.—The line is fenced from Wadi to Secunderabad, but from Secunderabad to the frontier only the station yards are fenced.

Curves.—The sharpest curve is of 1,300 feet radius.

Gradients.—The ruling gradient is 1 in 100 on the Hyderabad-British Frontier section and 1 in 150 on the Wadi-Husain Sagar section.

NIZAM'S GUARANTEED STATE RAILWAYS SYSTEM—*contd.*

Nizam's Guaranteed State railway (5′ 6″ gauge)—*contd.*

Contract and agreement—

Contract, dated the 27th December 1883, *between the Government of His Exalted Highness the Nizam of Hyderabad and the Nizam's Guaranteed State Railways Company, Limited,* as to the acquisition, management, maintenance and working of the line from Wadi to Hyderabad and Secunderabad, the construction, etc., of certain 5′ 6″ gauge extensions and the preferential right to construct all new railways in His Exalted Highness the Nizam's territories.

Agreement, dated the 16th March 1897, (supplemental to the contract of 1883), *between the Government of His Exalted Highness the Nizam of Hyderabad and the Nizam's Guaranteed State Railways Company, Limited,* as to the construction, management, maintenance and working, by the Company, of the Hyderabad-Godavari Valley railway.

Letter No. 257, dated the 7th March 1903, from the Government of His Exalted Highness to the address of the Railways Company as to rates and fares.

Main provisions of contract and agreement—

[NOTE.—Under this head, the expression "Government" means the Government of His Exalted Highness the Nizam of Hyderabad, except where otherwise stated.]

(i) *Land.*—Provided by the Government free of cost to the Company.

(ii) *Government aid.*—Guarantee of interest in sterling, at 5 per cent per annum on the Company's share (£2,000,000) and debenture (£1,500,000) capital for 20 years, from the date on which such capital is paid up. The guarantee in the case of the share capital ceased on the 25th June 1904, but the guarantee in respect of debenture capital, ceased or ceases, on various dates ranging from 30th June 1904 to 31st January 1928. The Government has accorded sanction to the issues of further debentures, amounting in all to £1,000,000 without any guarantee. Up to date the Government has agreed to take £700,000 of these debentures, of which £500,000 have been issued and loan received against issue of a further £100,000.

(iii) *Distribution of profits.*—During the period of the guarantee the repayment of the guaranteed interest for each half-year, and thereafter interest for each year, at the rate of 5 per cent on the share and debenture capital, is to be the first charge against the net earnings of such half-year or year. Of any residue, either before or after the cessation of the guarantee, one half is to be applied in payment of guaranteed interest not previously recouped and any other sums owing by the Company to the Government, and the other half is to be retained by the Company. When the Government has been reimbursed, all sums paid under the guarantee, together with simple interest thereon at 5 per cent per annum, the Company is to be entitled to the whole of the net earnings.

(iv) *Rates and fares.*—Not to exceed those from time to time prevailing on the Great Indian Peninsula railway, unless otherwise agreed between the Government and the Company. [By letter No. 257, dated the 7th March 1903, from the Secretary to the Government in the Financial Department to the Agent and Manager the provisions in this respect of the agreement of 1883 have been modified so as to permit the Company to levy such rates and fares as are not in excess of those which obtained on the Great Indian Peninsula railway at the date of that agreement.]

(v) *Special obligations as to the conveyance of,*—

(*a*) Mails and Post Office servants of the Government of His Exalted Highness and the Government of India.—To be conveyed free of charge.

(*b*) Troops, officials, and Government stores.—Troops and officials of the Government of His Exalted Highness and the Government of India to be conveyed at special rates; and stores at the lowest rates ordinarily chargeable.

(*c*) Bullion and coin.—At special rates.

(vi) *Power of the Government to determine agreement.*—In the event of any breach by the Company of any of the provisions of the agreement, the Government may give the Company in London six months' notice of its intention to determine the agreement; and unless the breach shall be remedied within the 6 months, the Government may determine the agreement and assume possession of the railway, paying to the Company in sterling so much of the capital as shall be unredeemed.

The Government may also terminate the agreement and purchase the railway, rolling-stock, etc., on the 1st January 1934, or 1st January 1954, by giving 12 months' notice. If the railway is thus acquired the Government is to pay to the Company, in sterling the amount of the unredeemed capital, *plus* a bonus of 25 per cent.

At the end of the full term of 99 years, if the agreement continues so long, the land in the possession of the Company, with the railway, buildings, works, and fixed machinery, will rever to the Government free from all debts and charges, but the rolling-stock, plant, movable machinery and stores must be purchased by the Government at their fair value.

NIZAM'S GUARANTEED STATE RAILWAYS SYSTEM—*contd.*

Nizam's Guaranteed State railway (5′ 6″ gauge)—*concld.*

Main provisions of contract and agreement—*concld.*

(vii) *Power of the Company to surrender agreement.*—Nil.

(viii) *Term of agreement* [*if not determined under* (vi) *or* (vii)].—99 years from the date on which the extension from Hyderabad towards Bezwada was opened throughout, *viz.*, 10th February 1889.

Statistics of working (Those for the periods prior to 1885 will be found in Appendix 38 to the Railway Administration Report for 1907.)—

Year.	Mileage open at end of each year.	Total capital outlay, including suspense, to end of each year, *i.e.*, outlay on (i) lines open and (ii) lines partly or wholly under construction.	Gross earnings.	Net earnings.	Percentage of net earnings on total capital outlay given in column (3).	Earnings per mile per week.	Proportion of expenses to earnings.
1	2	3	4	5	6	7	8
	Miles.	Rs.	Rs.	Rs.		Rs.	
1885	117·10	2,47,70,823	11,13,950	4,87,024	1·97	178	56·27
1886	205·37	2,89,19,499	13,81,077	6,94,524	2·40	143	49·71
1887	205·37	3,27,45,397	15,48,891	5,52,905	1·69	143	64·30
1888	305·71	3,54,89,073	17,76,075	7,57,467	2·13	116	57·35
1889	329·20	3,59,09,620	22,57,462	7,69,208	2·14	129	65·93
1890	329·20	3,76,96,721	25,07,268	10,39,590	2·76	145	58·54
1891	329·20	3,94,81,752	27,76,437	12,57,860	3·19	151	54·70
1892	329·20	3,95,48,395	27,80,642	13,24,959	3·35	161	52·35
1893	330·13	4,01,96,909	30,61,605	14,36,451	3·57	177	53·08
1894	330·13	4,02,33,826	32,56,885	16,22,028	4·03	188	50·20
1895	330·13	4,06,43,818	32,15,541	15,77,149	3·88	185	50·95
1896	330·13	4,08,24,737	33,03,522	17,28,196	4·23	191	47·69
1897	330·13	4,09,60,944	36,10,354	19,38,769	4·73	208	46·30
1898	330·13	4,10,54,449	39,07,612	22,74,580	5·54	225	41·79
1899	330·13	4,15,68,731	41,10,201	25,01,046	6·02	237	39·15
1900	330·13	4,17,49,124	49,12,056	28,41,965	6·81	283	42·14
1901	330·13	4,24,30,543	40,77,927	26,48,120	6·24	236	35·06
1902	330·13	4,28,89,527	44,06,494	26,82,533	6·25	254	39·12
1903	330·13	4,30,13,663	43,18,630	25,38,386	5·90	249	41·22
1904	330·13	4,32,66,412	43,32,440	27,90,690	6·45	250	35·59
1905	330·13	4,35,86,043	42,78,161	28,49,703	6·54	247	33 39
1906	330·13	4,36,45,097	44,84,105	27,98,897	6·41	259	37·58
1907	330·13	4,49,34,824	49,85,081	33,02,905	7·35	288	33·74
1908	330·13	4,56,07,808	46,99,296	30,15,029	6·61	255	38·96
1909	330·13	4,66,62,100	46,92,067	26,43,417	5·67	273	43·66
1910	330·13	4,72,19,094	53,14,905	28,46,520	6·03	309	46·44
1911	330·13	4,63,37,518	57,07,861	27,13,285	5·86	332	52·46
1912	330·13	4,84,96,844	57,76,606	31,96,188	6·59	337	44·67
1st qr. of 1913	330·13	4,87,78,182	16,58,727	7,42,254	1·52	386	55·25
1913-14	330·13	5,09,58,827	66,79,080	33,03,904	6·48	389	50·24
1914-15	330·13	5,17,23,846	58,68,725	30,17,075	5·83	342	48·59
1915-16	330·13	5,30,63,892	64,71,470	30,00,409	5·65	377	53·64
1916-17	330·13	5,30,31,296	66,04,721	38,19,720	7·20	385	42·17
1917-18	330·13	5,34,23,943	72,25,071	33,59,082	6·29	420	53·51

Bezwada Extension railway (5′ 6″ gauge)—

This line, which extends from the frontier of His Exalted Highness the Nizam's dominions to Bezwada was constructed for the Government of India, by the Nizam's Guaranteed State Railways Company and is being worked as a part of its own system.

Progress in opening—

Section of railway.	Date of opening.	Miles.	Total.	Remarks.
1	2	3	4	
Hyderabad frontier to Bezwada	10-2-89	21·47	*21·47	*Of this 1·22 miles, Bezwada Joint station to the outer signal, are maintained by the Madras and Southern Mahratta Railway.

Details of construction—

Permanent-way.—The line is laid with 66¼-lb. flat-footed steel rails on jarrah sleepers.
Ballast.—The line is ballasted throughout with stone and sand.
Fencing.—The line is fenced at stations only.
Curves.—There are no curves with a radius of less than 1,900 feet.
Gradients.—The ruling gradient is 1 in 100.

NIZAM'S GUARANTEED STATE RAILWAYS SYSTEM—*contd.*

Bezwada Extension railway (5′ 6″ gauge)—*concld.*

Agreements—

Dated the 6th April 1909, *between the Railway Board, acting on behalf of the Secretary of State and the Nizam's Guaranteed State Railways Company,* as to the maintenance, management and working, by the Company, of the Bezwada Extension railway.

Dated the 14th October 1915, (supplemental to the agreement of 1909), *between the Secretary of State and the Nizam's Guaranteed State Railways Company,* modifying the agreement of 1909 as regards dates for making up Accounts.

Main provisions of agreement—

(i) *Land.*—Provided by the Government at the cost of capital.

(ii) *Government aid.*—The line is the property of the Government, who provide all further funds chargeable to the capital account, and it is managed, maintained, stocked and worked by the Company as if it were part of the Company's 5′ 6″ gauge system.

(iii) *Terms of working.*—
(iv) *Distribution of profits.*— } The line is managed, maintained, stocked and worked by the Nizam's Guaranteed State Railways Company for the same percentage of its gross earnings as that of the working expenses of the Company's 5′ 6″ gauge system to its gross earnings, as published in the Company's Revenue Accounts for the same half-year, *plus* 5 per cent. of the gross earnings of the Bezwada Extension railway for the use of rolling-stock. But in addition thereto, any extraordinary maintenance charges due to causes other than ordinary wear and tear shall be charged, with the approval of the Railway Board, to the Bezwada Extension railway. Such extraordinary charges shall be excluded in working out the percentage of ordinary maintenance charges payable by the Bezwada Extension railway. The balance is paid over to the Government of India as the net earnings of the Bezwada Extension railway.

(v) *Rates and fares.*— } To be the same as from time to time obtain on the Company's 5′ 6″ gauge system.

(vi) *Special obligations as to the conveyance of.*—

(*a*) Mails, troops, police, high Government officials and Government stores.—

(*b*) Government bullion and coin, and the persons in charge thereof.—

(vii) *Power of the Government to determine agreement.*— } Terminable on the 1st January or the 1st July in any year, on 6 months' notice given by either party to the other. Any breach of the terms of the contract may lead, *ipso facto*, to its determination.
(viii) *Power of the Company to surrender agreement.*—

(ix) *Term of agreement.*—Until terminated under (vii) and (viii).

Statistics of working (Those for the periods prior to 1901 will be found in Appendix 38 to the Railway Administration Report for 1907.)—

Year.	Mileage open at end of each year.	Total capital outlay, including suspense, to end of each year, *i.e.*, outlay on (i) lines open and (ii) lines partly or wholly under construction.	Gross earnings.	Net earnings.	Percentage of net earnings on total capital outlay given in column (3).	Interest.	Gain or loss to the State *pertaining to each year.*	Earnings per mile per week.	Proportion of expenses to earnings.
1	2	3	4	5	6	7	8	9	10
	Miles.	Rs.	Rs.	Rs.		Rs.	Rs.	Rs.	
1901 .	20·58	11,51,678	2,77,177	1,56,929	13·63	35,509	+1,21,420	248	43·38
1902 .	20·58	11,60,425	2,89,663	1,40,329	12·09	46,375	+ 93,954	259	51·55
1903 .	20·58	11,77,047	3,07,113	1,54,222	13·10	46,617	+1,07,605	275	49·78
1904 .	20·58	11,75,731	3,20,656	1,78,955	15·22	46,898	+1,32,057	287	44·19
1905 .	20·58	11,78,645	3,47,490	2,04,239	17·33	47,046	+1,57,193	311	41·22
1906 .	20·58	11,81,020	3,49,206	1,91,737	16·23	47,182	+1,44,555	313	45·09
1907 .	20·58	11,81,952	3,15,376	1,83,853	15·56	35,691	+1,48,192	282	41·69
1908 .	20·58	11,83,796	3,38,923	1,91,624	16·19	40,277	+1,51,347	316	43·41
1909 .	20·58	12,06,026	3,12,154	1,52,554	12·65	39,884	+1,12,670	280	51·28
1910 .	20·58	12,01,940	3,42,614	1,58,254	13·17	40,182	+1,18,072	320	53·81
1911 .	20·58	12,19,123	3,54,265	1,40,815	11·55	41,560	+ 99,255	331	60·25
1912 .	20·58	12,22,363	3,84,244	1,84,265	15·07	41,771	+1,42,494	359	52·04
1st qr. of 1913.	20·58	12,31,370	1,05,502	39,771	3·23	10,432	+ 29,339	394	62·30
1913-14 .	20·58	12,33,842	4,10,238	1,73,986	14·10	43,138	+1,30,848	383	57·59
1914-15 .	20·58	12,42,759	4,51,983	2,00,734	16·15	43,331	+1,57,403	422	55·59
1915-16 .	20·58	12,46,788	4,77,021	1,89,111	15·17	43,225	+1,45,886	446	60·36
1916-17 .	20·58	12,49,073	4,89,045	2,49,856	20·00	41,137	+2,08,719	457	48·91
1917-18 .	21·47	12,49,143	5,22,946	3,01,519	23·88	43,382	+2,58,137	495	42·34

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NIZAM'S GUARANTEED STATE RAILWAYS SYSTEM—*contd.*

Hingoli Branch railway (3′ 3⅜″ gauge)—

Progress in opening—

Section of railway.	Date of opening.	Miles.	Total.
1	2	3	4
Purna to Hingoli	15-5-12	50·31	50·31

Details of construction—

Permanent-way.—The permanent-way consists of second hand 66¼ lb. flat-footed steel rails taken out of the 5′ 6″ gauge system and new steel trough sleepers.

Ballast.—The ballast used is moorum, except in some cuttings where stone ballast has been laid.

Fencing.—Fencing is provided only round station yards and a small length on either side of second class level crossings.

Curves.—The sharpest curve is of 1,910 feet radius.

Gradients.—The ruling gradient is 1 in 133.

Agreement—

Dated the 1st March 1910, *between the Government of His Exalted Highness the Nizam of Hyderabad and the Nizam's Guaranteed State Railways Company, Limited,* as to the maintenance, management and working of the Hingoli branch, by the Company, as part of the Hyderabad-Godavari Valley railway.

Main provisions of agreement—

[NOTE.—Under this head the expression "Government" means the Government of His Exalted Highness the Nizam of Hyderabad.]

(i) *Land.*—Provided by the Government free of cost.

(ii) *Government aid.*—The line is the property of the Government who provide all funds chargeable to the capital account.

(iii) *Terms of working.*—
(iv) *Distribution of profits.*— } The Nizam's Guaranteed State Railways Company works the Branch railway for the same proportion of its gross earnings as the aggregate working expenses of the 3′ 3⅜″ gauge system shall bear to the aggregate gross earnings of that system, *plus* 5 per cent of the gross earnings of the Branch for use of rolling-stock. The balance of the gross earnings of the Branch after making the said deduction is paid to the Government as the net earnings of the Branch. In the case of accident or damage caused by extraordinary casualty, *e.g.*, by floods, storms, etc., charges for repairs are made to the Branch railway, such charges being eliminated from the aggregate working expenses before the percentage of working expenses referred to above is arrived at.

[A revised agreement is under consideration, under the terms of which the Branch will be worked for actual cost *plus* 10 per cent. of the gross earnings for hire of rolling-stock, until Branch is equipped with its own rolling-stock.]

(v) *Rates and fares.*—The same rates and fares as are in force on the Hyderabad-Godavari Valley railway.

(vi) *Special obligations as to the conveyance* of.—
(*a*) Mails.—
(*b*) Troops, police, and high Government officials.— } Services for these are performed on the same conditions and at the same rates as may be in force on the Hyderabad-Godavari Valley railway.

(vii) *Power of the Government to determine agreement.*—
(viii) *Power of the Company to determine agreement.*— } The agreement is terminable by either party on the 30th June or the 31st December in any year after the line is opened throughout on 12 months' previous notice in writing.

(ix) *Power of the Company to surrender agreement.*—Nil.

(x) *Term of agreement.*—Nil.

NIZAM'S GUARANTEED STATE RAILWAYS SYSTEM—*contd.*

Hingoli Branch railway (3′ 3⅜″ gauge)—*concld.*

Statistics of working—

Year.	Mileage open at end of each year.	Total capital outlay, including suspense to end of each year, *i.e.*, outlay on (i) lines open and (ii) lines partly or wholly under construction.	Gross earnings.	Net earnings.	Percentage of net earnings on total capital outlay given in column (3).	Earnings per mile per week.	Proportion of expenses to earnings.
1	2	3	4	5	6	7	8
	Miles.	Rs.	Rs.	Rs.		Rs.	
1912	50·31	30,18,733	64,758	25,722	0·85	39	60·28
1st qr. of 1913	50·31	30,43,772	28,529	9,993	0·33	44	64·97
1913-14	50·31	31,23,102	1,42,367	64,511	2·07	54	54·69
1914-15	50·31	31,86,279	1,17,823	46,104	1·44	45	60·87
1915-16	50·31	31,92,223	1,33,243	58,029	1·82	51	*56·45
1916-17	50·31	31,92,924	1,21,594	58,670	1·84	46	51·75
1917-18	50·31	32,06,202	1,36,655	15,629	0·49	52	88·56

Hyderabad-Godavari Valley railway (3′ 3⅜″ gauge)—

Progress in opening—

Sections of railway.	Date of opening.	Miles.	Total.	Remarks.
1	2	3	4	5
Manmad to Jalna	21-10-99	109·28		
Jalna to Sailu	7-12-99	44·79		
Sailu to Purbhani	25-4-00	26·40		
Purbhani to Nanded	9-10-00	36·60		
Nanded to Sivungaon	23-8-00	17·61		
Sivungaon to Secunderabad	25-4-00	150·59		
Secunderabad to Hyderabad	16-5-01	*5·86		*Laid on a mixed (5′ 6″ and 3′ 3⅜″) gauge.
TOTAL			391·13	
DOUBLE LINE—				
Purna Junction station yard	15-5-12	0·38		
			0·38	

Details of construction—

Permanent-way.—The permanent-way consists of 50-lb. flat-footed steel rails on steel pea-pod sleepers between miles 0 and $\frac{1}{16}\frac{0}{7}$, $\frac{2}{1}\frac{0}{7}\frac{1}{1}$ and 384·27, except within station limits where wooden sleepers are used, and also on second-hand 5′ 6″ gauge steel sleepers converted into 3′ 3⅜″ gauge, between miles $\frac{3}{1}\frac{0}{4}\frac{7}{}$ and $\frac{2}{1}\frac{0}{7}\frac{7}{}$, and wooden sleepers for the remainder.

Ballast.—The line is ballasted throughout with stone, sand and moorum.

Fencing.—The line is fenced from mile 377¼ to 381 and between miles 249 and 250, and at all stations.

Curves.—The sharpest curve is of 1,433 feet radius.

Gradients.—The ruling gradient is 1 in 133·3.

Agreement—

Dated the 16th March 1897 (supplemental to the contract of 1883) *between the Government of His Exalted Highness the Nizam of Hyderabad and the Nizam's Guaranteed State Railways Company, Limited,* as to the construction, management, maintenance and working, by the Company, of the Hyderabad-Godavari Valley railway.

Main provisions of agreement—

(i) *Land.*—Provided by the Government of His Exalted Highness free of cost to the Company.

(ii) *Government aid.*—Guarantee in sterling, for 20 years from the date on which the line was completed and opened for traffic throughout (9th October 1900), of the interest payable on the debenture capital (not exceeding £2,500,000) raised for the purposes of the contract, together with an additional one per cent for a Sinking Fund. (The amount of capital raised to the present time is £2,150,000, and the rate of interest payable on it is 3½ per cent.) The guarantee terminates on 8th October 1920.

NIZAM'S GUARANTEED STATE RAILWAYS SYSTEM—*contd.*

Hyderabad-Godavari Valley railway (3′ 3⅜″ gauge)—*concld.*

Main provisions of agreement—*concld.*

(iii) *Distribution of profits.*—During the period of the guarantee the repayment of the guaranteed interest for each half-year, and thereafter the interest payable on the debenture capital for each year, is to be the first charge against the net earnings for such half-year or year. Any surplus either before or after the cessation of the guarantee, is to be divided equally between the Government of His Exalted Highness, and the Company.

(iv) *Rates and fares.*—Not to be in excess of those prevailing on the Nizam's Guaranteed State railway unless otherwise agreed.

(v) *Special obligations as to the conveyance of.*—
(*a*) Mails.—
(*b*) Troops, officials and Government stores.—
(*c*) Bullion and coin.—
} As noted under the Nizam's Guaranteed State railway.

(vi) *Power of the Government of His Exalted Highness to determine agreement.*—As noted under the Nizam's Guaranteed State railway, with the exception that, in the event of the line being purchased in 1934 or 1954, the price to be paid is to be the amount of the unredeemed capital only, without the bonus of 25 per cent in addition.

(vii) *Power of the Company to surrender agreement.*—Nil.

(viii) *Term of agreement* [*if not determined under* (vi) *or* (vii)].—The remainder of the term of the contract relating to the Nizam's Guaranteed State railway which was unexpired at the date of the present contract.

Statistics of working—

Year.	Mileage open at end of each year.	Total capital outlay, including suspense to end of each year, *i.e.*, outlay on (i) lines open and (ii) lines partly or wholly under construction.	Gross earnings.	Net earnings.	Percentage of net earnings on total capital outlay given in column (3).	Earnings per mile per week.	Proportion of expenses to earnings.
1	2	3	4	5	6	7	8
	Miles.	Rs.	Rs.	Rs.		Rs.	
1899	154·23	2,00,21,971	63,381	36,877	0·18	48	41·82
1900	385·23	2,31,94,817	10,63,023	4,20,826	1·81	70	60·41
1901	391·42	2,46,58,951	20,10,033	9,23,300	3·74	99	54·07
1902	391·42	2,57,75,220	22,88,043	9,67,892	3·76	112	57·70
1903	391·42	2,62,07,241	22,14,752	8,86,291	3·38	109	59·98
1904	391·13	2,64,85,096	22,11,781	7,74,804	2·93	109	64·97
1905	391·13	2,68,15,349	29,64,122	13,29,009	4·96	146	55·16
1906	391·13	2,69,36,746	30,32,503	14,21,747	5·28	149	53·12
1907	391·13	2,71,85,309	32,55,067	17,74,126	6·53	160	45·50
1908	391·13	2,73,97,247	32,41,828	15,61,740	5·70	159	51·82
1909	391·13	2,75,50,030	32,54,724	14,02,129	5·09	160	56·93
1910	391·13	2,79,30,418	36,55,833	18,05,391	6·46	180	50·62
1911	391·13	2,91,88,053	34,97,306	13,12,510	4·50	172	62·48
1912	391·13	2,96,12,624	43,60,567	20,26,995	6·85	214	53·52
1st qr of 1913	391·13	2,98,32,787	12,79,019	4,87,877	1·64	252	61·86
1913-14	391·13	3,04,91,995	43,08,162	20,88,400	6·85	212	51·63
1914-15	391·13	31 9, 21,083	41,16,162	17,40,623	5·45	202	57·71
1915-16	391·13	3,19,95,320	44,81,233	20,96,695	6 55	220	53·21
1916-17	391·13	3,22,84,005	39.32,278	18,75,441	5·81	193	52·27
1917-18	391·13	3,22,46,491	39,71,902	15,63,991	4·85	195	60·62

Secunderabad-Gadwal railway (3′ 3⅜″ gauge)—

The construction of this line, from funds to be provided by His Exalted Highness the Nizam's Government was sanctioned by the Secretary of State in his Despatch No. 26 Railway, dated the 27th February 1914.

NIZAM'S GUARANTEED STATE RAILWAYS SYSTEM—*concld.*

Secunderabad-Gadwal railway (3′ 3⅜″ gauge)—*concld.*

Progress in opening—

Sections of railway.	Date of opening.	Miles.	Total.	Grand total
1	2	3	4	5
Secunderabad to Timmapur	1-2-16	27·52		
Timmapur to Chatanpalli	20-2-16	9·19		
Chatanpalli to Balanagar	6-3-16	8·39		
Balanagar to Gullapalli	1-4-16	9·45		
Gullapalli to Jadcharla	20-4-16	4·68		
Jadcharla to Mahbubnagar	15-5-16	10·97		
Mahbubnagar to Daverkudra	15-11-16	15·17		
Daverkudra to Kurumurti	1-1-17	9·74		
Kurumurti to Wanaparti Road	15-2-17	8·19		
TOTAL OPEN MILEAGE ...	...	...	103·30	
UNDER CONSTRUCTION OR SANCTIONED FOR CONSTRUCTION—				
Wanaparti Road to Gadwal (sanctioned on 27th February 1914) ...	...	13·45	13·45	
GRAND TOTAL ...	...	...	...	116·75

Details of construction—

Permanent-way.—The permanent-way consists of 66½-lb. flat-footed rails laid on steel sleepers.

Ballast.—Cuttings are being fully ballasted and banks are being moorumed throughout.

Fencing.—The line is being fenced in the vicinity of the principal towns and most important stations.

Curves.—The sharpest curve is of 1,432·5 feet radius.

Gradients.—The ruling gradient is 1 in 133·3.

Agreement.—

Main provisions of agreement.— The line has been constructed, and is being worked by the Nizam's Guaranteed State Railways Company under the terms of an agreement which is under consideration.

Statistics of working—

Year.	Mileage open at end of each year.	Total capital outlay, including suspense to end of each year, *i.e.*, outlay on (i) lines open and (ii) lines partly or wholly under construction.	Gross earnings.	Net earnings.	Percentage of net earnings on total capital outlay given in column (3).	Earnings per mile per week.	Proportion of expenses to earnings.
1	2	3	4	5	6	7	8
	Miles.	Rs.	Rs.	Rs.		Rs.	
1915-16 . .	46·00	67,56,000	Information not available.		...	...	...
1916-17 . .	103·30	84,42,687	98,360	−11,348	...	27	111·54
1917-18 . .	103·30	92,68,479	3,80,572	52,601	0·57	·71	86·18

NORTH WESTERN RAILWAY SYSTEM.

Lines comprised in the system.—The North Western railway system is made up of—

	Open line.	Under construction or sanctioned for construction.	Total.
	Miles.	Miles.	Miles.
(*a*) North Western railway (5′ 6″ gauge)	3,690·27	...	3,690·27
(*b*) Amritsar-Patti railway (5′ 6″ gauge)	54·26	...	54·26
(*c*) Hoshiarpur Doab Branch railways (5′ 6″ gauge)—			
Jullundur-Mukerian section	44·81	...	44·81
Phagwara-Rahon section	45·21	...	45·21
(*d*) Jammu and Kashmir (Native State section) (5′ 6″ gauge)	16·01	...	16·01
(*e*) Khanpur-Chachran railway (5′ 6″ gauge)	22·02	...	22·02
(*f*) Ludhiana-Dhuri-Jakhal railway (5′ 6″ gauge)	78·65	...	78·65
(*g*) Mandra-Bhaun railway (5′ 6″ gauge)	46·38	...	46·38
(*h*) Rajpura-Bhatinda railway (5′ 6″ gauge)	108·04	...	108·04
(*i*) Sialkot-Narowal railway (5′ 6″ gauge)	38·16	...	38·16
(*j*) Southern Punjab railway (Main line) (5′ 6″ gauge)	425·92	...	425·92
(*k*) Southern Punjab railway (Jullundur Doab Extension) (5′ 6″ gauge)	130·19	...	130·19
(*l*) Southern Punjab railway (Ludhiana Extension) (5′ 6″ gauge)	152·04	...	152·04
(*m*) Southern Punjab railway (Sutlej Valley Extension) (5′ 6″ gauge)	(dismantled)	...	...
(*n*) Jacobabad-Kashmor railway (2′ 6″ gauge)	76·70	...	76·70
(*o*) Kalka-Simla railway (2′ 6″ gauge)	59·92	...	59·92
(*p*) Kohat-Thal railway (2′ 6″ gauge)	61·75	...	61·75
(*q*) Nowshera-Durgai railway (2′ 6″ gauge)	40·40	...	40·40
(*r*) Trans Indus (Kalabagh-Bannu) railway 2′ 0″ gauge)	135·38	...	135·38
(*s*) Larkhana-Jacobabad (Sind) Light railway (2′ 0″ gauge)	...	75·45	75·45
Total	5,226·11	75·45	5,301·56

Running powers—

Home line over foreign line:—

Ghaziabad to Delhi, East Indian railway, for passenger and goods trains . . . . . 16·00

Foreign line over home line:—

Oudh and Rohilkhand railway, Meerut City to Meerut Cantonment, for passenger trains only	2·75
East Indian railway, Jind City to Jind Junction, for passenger and goods trains	2·95
Total	5·70

North Western railway (5′ 6″ gauge)—

The line owned and worked by the old Sind, Punjab and Delhi Guaranteed Railway Company was taken over by the State, from the 1st January 1886, and amalgamated with the Punjab Northern, the Indus Valley, the Eastern section Sind-Sagar, and the Southern section Sind-Pishin State railways, to be worked as an undertaking under the name of the North Western railway.

Date of registration of the old Guaranteed Company—1855.

Progress in opening—

Sections of railway.	Date of opening.	Miles.	Total.	Grand total.	Remarks.
1	2	3	4	5	6
COMMERCIAL SECTION—					
Main Line—					
Ghaziabad to Meerut City	18-4-67	27·33			
Meerut City to Ambala Cantonment	1-1-69	121·55			
Ambala Cantonment to Ludhiana	12-10-69	70·66			
Ludhiana to Phillaur	14-10-70	8·28			
Phillaur to Jullundur Cantonment	1-4-70	26·12			
Jullundur Cantonment to Beas	15-11-69	25·53			
Beas to Amritsar	1-11-67	26·20			
Amritsar to Lahore	10-4-62	32·33			
Lahore to Jhelum	6-10-78	*103·12			
Jhelum to Rawalpindi	†	76·38			
Rawalpindi to mile 560·63 (between Lawrencepur and Campbellpur Cantonment).	1-1-81	45·38			
Mile 560·63 to Rumian	1-4-99	11·50			
Rumian to Attock Bridge	...	5·25			
Attock Bridge to Khairabad	31-5-83	2·38			
Khairabad to Peshawar City	1-5-82	41·25			
Peshawar City to Peshawar Cantonment	1-1-83	2·65			
Lahore to Khanewal	24-4-65	177·25			
Khanewal to Lodhran	1-4-09	56·42			
Lodhran to Nara Canal Bridge	1-7-78	224·58			
Nara Canal Bridge to Rohri	0-0-89	1·00			
Rohri to Rahoki	15-11-96	178·09			
Rahoki to Hyderabad	28-3-10	6·25			
Hyderabad to Kotri	25-5-00	5·29			
Kotri to Karachi City	13-5-61	105·04			
Karachi City to Kiamari, including Napier Mole.	16-6-89	3·07	1,382·90		
Branches—					
Havelian branch—					
Sarai Kala to Havelian	7-11-13	34·64	34·64		
Tawi branch (British section)—					
Wazirabad to Sialkot	1-1-84	26·40			
Sialkot to the frontier of Kashmir State	15-3-90	9·08	35·48		
Carried over	...	...	1,453·02		

*This length was constructed on the 3′ 3½″ gauge previous to September 1873 but was converted to the 5′ 6″ gauge on the 6th October 1878.

† The line was opened by sections on the 5′ 6″ gauge, using temporary diversions near Domeli—thus Jhelum to Ratial, 1st January 1880 (15 miles) and Ratial to Rawalpindi, 1st October 1880 (56 miles). The diversions were abolished on 8th May 1882; and the complete 1/50 graded through line between Jhelum and Rawalpindi (70·50 miles) was established. But again in 1888, and in subsequent years up to date, various alignments in connection with the improvements of grades to 1/100 have been opened and the present length of line on the 31st March 1897 is—Jhelum to Rawalpindi 76·38 miles.

NORTH WESTERN RAILWAY SYSTEM—*contd.*

North Western railway (5′ 6″ gauge)—*contd.*

Progress in opening—*contd.*

Sections of railway.	Date of opening.	Miles.	Total.	Grand total.	Remarks.
1	2	3	4	5	6
Brought forward	...	...	1,453·02		
Wazirabad-Khanewal branch—					
Wazirabad to Hafizabad	15-8-95	37·37			
Hafizabad to Sangla Hill	1-1-96	31·45			
Sangla Hill to Lyallpur	15-2-96	27·21			
Lyallpur to Toba Tek Singh	22-6-99	49·00			
Toba Tek Singh to Khanewal	16-4-00	55·53			
			200·56		
Phulji branch—					
Phulji to Puranadera	1-6-82	2·57			
Phulji branch extension	31-3-02	0·34			
			2·91		
Sukkur Bandar branch—					
Sukkur Main to Sukkur Bandar	1-10-78	1·52			
			1·52		
Kotri-Rohri (vid Ruk) branch—					
Rohri to Sukkur	27-3-89	2·64			
Sukkur to Radhan *vid* Ruk	1-10-78	79·31			
Radhan to Laki	27-10-78	70·57			
Laki to Kotri	8-10-78	75·48			
			228·00		
Raewind-Bhatinda branch—					
Raewind to Kasur	15-4-83	16·70			
Kasur to Ganda Singhwala	10-6-83	7·00			
Ganda Singhwala to Hussainiwala	15-12-83	2·75			
	8-5-87	2·75			
Hussainiwala to Ferozepore City	1-10-92	2·00			
Ferozepore City to Ferozepore Cantonment.	1-10-88	2·00			
Ferozepore Cantonment to Bhatinda	15-6-99	55·23			
			88·43		
Pathankot branch—					
Amritsar to Dinanagar	1-1-84	51·22			
Dinanagar to Pathankot	8-6-84	15·48			
			66·70		
Hoshiarpur branch—					
Jullundur City to Hoshiarpur.	16-5-13	23·28			
			23·28		
Jech Doab line—					
Malakwal to Sargodha	1-4-03	46·25			
Sargodha to Shorkot Road	14-5-06	102·56			
			148·81		
Shahdara-Sangla branch—					
Shahdara to Sangla	10-4-07	54·76			
			54·76		
Lodhran-Khanewal chord (vid Sher Shah)—					
Khanewal to Multan Cantonment	24-4-65	30·50			
Multan Cantonment to Muzaffarabad	21-8-70	6·89			
Muzaffarabad to Lodhran	1-7-78	47·61			
			85·00		
Shorkot Road-Chichoki Mallian section—					
Shorkot Road to Jaranwala	2-5-11	87·70			
Jaranwala to Chichoki Mallian	18-11-09	48·10			
			135·80		
Jakhal Hissar branch—					
Jakhal to Hissar	1-11-13	50·22			
			50·22		
TOTAL OPEN MILEAGE (COMMERCIAL SECTION)	...	...	...	2,539·01	
FRONTIER SECTION (MILITARY)—					
Sind-Sagar line—					
Main line—					
Lala Musa to Baha-ud-din	†1-1-80	29·61			†Date of opening of the original 3′ 3⅜″ gauge line, subsequently converted to, and opened on, the 5′ 6″ gauge, Lala Musa to Malakwal, on 10-2-86.
Baha-ud-din to Hariah	†1-2-80	10·52			
Hariah to Malakwal	†10-4-80	5·99			
Malakwal to Bhakkar (*vid* Kundian)	15-8-87	172·20			
Bhakkar to Chenab West Bank	22-1-87	119·71			
Chenab West Bank to Chenab East Bank	1-2-90	2·49			
Chenab East Bank to Sher Shah	1-1-89	2·39			
			342·91		
Branches and sections—					
Golra-Basal section—					
Golra Junction to Basal Junction	1-1-81	46·75			
			46·75		
Kohat section—					
Jand to Khushalgarh	16-4-81	7·00			
Khushalgarh to Kohat	‡25-5-02	32·46			‡This is the date of opening of the original 2′ 6″ gauge line which was subsequently converted to, and opened on, the 5′ 6″ gauge on 5-1-08.
			39·46		
Bhera branch—					
Malakwal to Miani	§10-4-80	8·69			§Dates of opening of original 3′ 3⅜″ gauge lines, subsequently converted to, and opened on, the 5′ 6″ gauge, Malakwal to Bhera, on 15-3-87.
Miani to Bhera	§2-2-82	9·11			
			17·80		
Bhaganwala branch—					
Haranpur to Bhaganwala	31-8-95	10·84			
			10·84		
Warcha quarry branch—					
Gunjyal to Warcha	22-12-17	8·32			
			8·32		
Carried over	...	....	466·08	2,539·01	

NORTH WESTERN RAILWAY SYSTEM—*contd.*

North Western railway (5′ 6″ gauge)—*contd.*

Progress in opening—*concld.*

Sections of railway.	Date of opening.	Miles.	Total.	Grand total.	Remarks.
1	2	3	4	5	6
Brought forward	...	...	466·08	2,539·01	
FRONTIER SECTION (MILITARY)—*concld.*					
Dandot branch—					
Chalisa Junction to Khewra salt mines	*1-1-83	6·36			*Date of opening of the original 3′ 3⅜″ gauge line, subsequently converted to, and opened on, the 5′ 6″ gauge, Chalisa Junction to Khewra salt mines, on 15-8-87 and Khewra to Dandot on 1-8-89.
Khewra to Dandot	*1-1-83	2·15			
			8·51		
Kundian-Campbellpur section—					
Kundian to Daud Khel	15-3-92	30·34			
Daud Khel to Jand	1-4-99	54·65			
Jand to Basal	16-4-81	16·41			
Basal to Campbellpur	1-4-99	18·45			
			119·85		
Mari branch—					
Daud Khel to Mari	15-3-92	6·25			
			6·25		
Ghazi Ghat branch—					
Mahmud Kot to Ghazi Ghat	1-4-87	10·55			
			10·55		
Peshawar-Jamrud branch—					
Peshawar to Jamrud	1-1-01	11·04			
			11·04		
Sind-Pishin section—					
Main line—					
Ruk to Sibi	2-5-80	132·97			
Sibi to Sharigh	20-3-87	74·80			
Sharigh to Bostan	21-8-87	61·13			
Base of Bostan triangle loop	...	0·31			
Bostan to Kila Abdulla	25-1-88	38·14			
Kila Abdulla to Chaman	1-1-92	29·40			
			336·75		
Loop line—					
Sibi to Quetta	1-5-82	87·04			†These are the dates of opening of the old alignment which, owing to frequent breaches by floods, was dismantled and realigned in certain parts of its length on 15th April 1897.
	†20-3-87				
Quetta to Bostan	21-8-87	20·57			
Bostan chord	1-1-98	1·34			
			108·95		
Quetta-Nushki extension—					
Spezand Junction to Nushki	15-11-05	83·28			
			83·28		
TOTAL OPEN MILEAGE FRONTIER SECTION (MILITARY)	...	...	...	1,151·26	
GRAND TOTAL OPEN MILEAGE (COMMERCIAL AND MILITARY)	...	...	...	3,690·27	
DOUBLE LINE (COMMERCIAL AND MILITARY SECTIONS)—					
Kiamari to Karachi City	30-6-97	3·07			
Karachi City to Karachi Cantonment	13-5-61	2·30			
Karachi Cantonment to Pipri	20-6-97	21·45			
Pipri to Kotri	3-5-98	81·89			
Gidu to Hyderabad	1-4-13	3·56			
Gulistan to Chaman	20-9-92	37·58			
Ab-i-Gum to Kolpur	20-9-92	22·78			
Lodhran to Samasata	1-4-09	14·50			
Samasata to Khanpur	2-4-07	76·49			
Khanpur to Reti	3-4-07	62·00			
Reti to Rohri	1-6-07	70·05			
Rohri to Janvari	21-6-12	3·70			
Janvari to Begmanji	20-5-14	4·11			
Khararo to Chahi	20-5-14	6·74			
Amritsar to Lahore	15-1-06	32·32			
Lahore to Badami Bagh	18-10-09	1·34			
Badami Bagh to Shahdara	8-1-10	2·88			
Amritsar to Jandiala	23-3-10	11·28			
Jandiala to Botari	19-7-10	7·80			
Botari to Beas	10-12-10	6·85			
Beas to Dhilwan	28-2-14	1·99			
Dhilwan to Hamira	12-9-11	6·83			
Hamira to Jullundur Cantonment	13-3-10	15·95			
Jullundur Cantonment to Phagwara	20-4-11	10·22			
Phagwara to Ludhiana	1-6-11	24·30			
Ludhiana to Doraha	10-1-11	14·71			
Doraha to Gobindgarh	15-12-10	17·75			
Gobindgarh to Sirhind	10-1-11	5·00			
Sirhind to Rajpura	15-12-10	15·75			
Rajpura to Ambala	2-12-10	17·25			
Ambala to Kalanour	15-11-13	36·31			
Kalanour to Saharanpur	13-5-13	14·03			
Lahore to Raewind	16-7-12	23·94			
Hyderabad to Shahdadpur	1-7-15	45·60			
TOTAL DOUBLE LINE ...	...	...	722·33		

NORTH WESTERN RAILWAY SYSTEM—*contd.*

North Western railway (5′ 6″ gauge)—*concld.*

Details of construction—

Permanent-way.—The permanent-way is of various types. On the single line, of iron rails there are 60-lb. flat-footed; and 68-lb. double-headed; of steel rails there are 60-lb., 61-lb., 62-lb., 70-lb., 75-lb., 90-lb., and 100-lb. flat-footed; 64-lb. 68-lb., and 75-lb. double-headed; 68-lb., 73-lb., 77½-lb., 84-lb. and 85-lb. bull-headed and 60-lb., 75-lb. and 90-lb. British standard section. On the double line the steel rails are 68-lb. double-headed, 77½-lb. bull-headed and 75-lb., 87-lb., 90-lb. and 100-lb. flat-footed. The sleepers used are chiefly of wood, but cast-iron plates, (oval or round) pots and steel transverse sleepers are also extensively used.

Ballast.—The line is ballasted throughout with sand, bricks and broken stone.

Fencing.—The line is fenced from Karachi to Lahore and from Lala Musa to Ghaziabad, also from Ruk to Jhatpat. The line between Lala Musa and Peshawar is partially fenced.

Curves.—The sharpest curve is of 455 feet radius.

Gradients.—The ruling gradient of the greater part of the railway is about 1 in 350 with the following important exceptions: between Karachi and Kotri 1 in 190; between Luki and Schwan 1 in 150; between Lalamusa and Peshawar 1 in 100; beyond Sibi 1 in 40 with 1 in 25 banking sections; between Jullundur and Hoshiarpur 1 in 200; between Sialkot and Jammu and Gurdaspur and Pathankote 1 in 170; between Seraikala and Haripur 1 in 100; between Haripur and Havelian 1 in 50; between Daudkhel and Campbellpur 1 in 83; between Rawalpindi and Kohat 1 in 70, except between Khushalgarh and Jand which is 1 in 50; and between Peshawar and Jamrud 1 in 50.

Contract—

Nil.—The line is owned and worked by the State.

Rates and fares.—Certain maxima and minima have been fixed by the Government, between the limits of which the Railway Administration can vary the rates and fares quoted for goods and coaching traffic.

Statistics of working (Those for the periods prior to 1886 will be found in Appendix 38 to the Railway Administration Report for 1907.)—

Includes the Kohat-Thal, Nowshera-Durgai and Trans Indus (Kalabagh-Bannu) railways from date of opening, and the Kalka-Simla railway from 1907, the year in which it became an integral part of the North Western railway system.

Year.	Mileage open at end of each year.	Total capital outlay, including suspense, to end of each year, *i.e.*, outlay on (1) lines open and (4) lines partly or wholly under construction.	Gross earnings.	Net earnings.	Percentage of net earnings on total capital outlay given in column (3).	Government share of surplus profits *less* payments made on account of rebate.	Total income (column 5+column 7).	Percentage of total income on total capital outlay given in column (3).	Interest.	Annuity.	Gain or loss to the State *pertaining to each year.*	Commercial section.		Military section.		Entire line.	
												Earnings per mile per week.	Pro: of exp: to earnings.	Earnings per mile per week.	Pro: of exp: to earnings.	Earnings per mile per week.	Pro: of exp: to earnings.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
	Miles.	Rs.	Rs.	Rs.		Rs.	Rs.		Rs.	Rs.	Rs.	Rs.		Rs		Rs.	
1886	1,850·78	36,09,90,705	2,53,60,901	1,19,92,839	3·32	...	1,19,92,839	3·32	1,14,07,148	53,00,733	—47,15,042	...	...	...	...	261	52·49
1887	2,398·79	38,37,70,872	2,10,03,388	57,77,585	1·51	...	57,77,585	1·51	1,01,56,779	80,30,322	—1,24,09,516	...	...	...	...	182	72·33
1888	2,441·73	39,71,81,200	2,57,79,305	83,66,598	2·11	...	83,66,598	2·11	1,09,18,938	83,45,756	—1,08,98,096	...	...	...	...	202	67·37
1889	2,442·10	40,94,31,603	2,82,06,820	1,02,84,741	2·51	..	1,02,84,741	2·51	1,13,76,516	83,98,768	—94,90,543	290	56·53	90	107·75	224	63·35
1890	2,465·78	41,83,37,620	2,73,99,035	1,02,57,601	2·45	...	1,02,57,601	2·45	1,16,66,585	74,54,323	—88,63,307	283	54·95	88	110·72	219	62·35
1891	2,465·99	42,15,91,441	3,25,78,355	1,21,32,521	2·88	...	1,21,32,521	2·88	1,20,67,542	80,05,299	—79,40,320	344	55·60	88	122·41	261	62·98
1892	2,526·06	43,00,61,140	2,64,35,865	94,50,960	2·20	...	94,50,960	2·20	1,24,26,030	89,84,076	—1,19,59,146	260	55·58	70	131·08	208	64·25
1893	2,573·23	43,99,74,051	2,92,68,732	97,97,643	2·23	...	97,97,643	2·23	1,27,61,682	90,98,545	—1,20,62,584	313	60·20	69	122·71	230	66·55
1894	2,528·21	45,06,76,395	3,23,14,097	1,28,25,181	2·85	...	1,28,25,181	2·85	1,24,63,279	1,03,59,245	—99,97,343	347	53·11	76	122·95	253	60·31
1895	2,575·90	46,56,84,932	3,52,18,382	1,64,46,998	3·53	...	1,64,46,998	3·53	1,35,01,193	1,03,17,385	—73,71,580	379	46·79	75	116·14	274	53·30
1896	2,713·91	48,10,61,362	2,94,41,740	1,18,86,409	2·47	...	1,18,86,409	2·47	1,42,35,427	96,43,588	—1,19,92,606	292	54·68	75	97·77	220	59·55
1897	2,817·02	49,07,95,756	3,29,03,448	1,49,78,897	3·05	—19,942	1,49,58,955	3·05	1,45,40,298	90,95,191	—86,76,534	302	49·70	72	93·76	225	54·38
1898	2,817·64	49,65,81,389	3,76,01,912	1,85,74,360	3·74	...	1,85,74,360	3·74	1,50,41,459	86,35,849	—51,02,948	354	45·98	63	101·26	256	50·69
1899	2,944·80	50,27,26,360	3,52,21,759	1,60,89,223	3·20	—17,318	1,60,71,905	3·20	1,50,40,201	85,61,408	—75,29,702	326	47·78	58	123·43	232	54·22
1900	3,005·67	50,85,96,582	3,15,22,237	1,32,19,151	2·60	—3,562	1,32,15,589	2·60	1,54,25,164	85,76,682	—1,07,86,257	275	52·34	60	107·61	202	58·02
1901	3,117·37	51,54,17,599	4,11,69,277	2,03,56,471	3·95	1,78,653	2,05,36,124	3·98	1,55,93,807	86,02,222	—36,65,905	350	45·41	69	99·55	255	50·32
1902	3,147·45	52,81,86,554	4,22,19,927	1,73,70,094	3·29	41,522	1,74,11,616	3·30	1,60,21,945	85,81,455	—71,91,784	360	53·63	67	112·42	262	58·62
1903	3,255·73	53,53,09,487	4,93,83,876	2,50,08,517	4·67	81,050	2,50,89,567	4·69	1,63,40,061	85,77,430	+1,72,076	421	44·42	65	106·94	294	49·36
1904	3,317·54	55,14,60,717	6,16,56,310	3,22,92,909	5·86	2,22,023	3,25,14,932	5·90	1,69,17,362	85,77,430	+70,20,140	519	42·29	75	113·47	361	47·69
1905	3,400·83	57,66,87,197	5,86,74,943	2,90,52,383	5·04	4,28,070	2,94,80,453	5·11	1,76,38,636	85,77,430	+32,64,387	493	46·65	75	94·82	338	50·46
1906	3,503·69	60,07,74,838	6,18,66,041	2,93,40,819	4·84	5,33,940	2,98,74,759	4·93	1,87,21,081	85,77,430	+25,76,248	495	48·22	77	101·07	343	52·57
1907	3,614·89	64,07,43,048	7,04,86,241	3,38,51,329	5·23	7,48,270	3,45,99,599	5·35	1,58,47,585	85,77,430	+1,01,74,584	534	47·21	78	112·58	375	51·93
1908	3,618·10	69,00,11,581	5,61,66,152	*93,38,475	1·35	6,35,068	99,73,543	1·45	1,86,33,292	85,77,430	—1,72,37,179	413	76·58	81	148·06	298	83·34
1909	3,723·91	72,31,99,764	6,79,03,754	2,13,69,240	2·95	3,37,037	2,17,06,277	3·00	1,96,54,274	85,77,430	—65,25,427	499	62·52	79	140·79	356	68·48
1910	3,725·89	73,64,05,633	7,41,00,787	2,51,73,007	3·41	5,83,661	2,57,56,668	3·50	2,00,55,641	85,77,430	—28,76,403	534	61·69	82	122·51	382	65·22
1911	3,813·22	75,46,44,149	7,93,87,066	3,12,68,435	4·15	4,49,374	3,17,17,809	4·14	2,11,43,800	85,77,430	+19,91,579	567	56·26	86	117·39	402	60·61
1912	3,812·29	78,05,55,336	9,06,27,413	4,37,15,957	5·60	6,82,983	4,43,98,940	5·68	2,20,67,200	85,77,430	+1,37,54,310	638	48·12	91	100·16	466	51·76
1st qr. of 1913	3,814·97	79,99,81,409	2,00,25,197	50,07,044	0·62	—71,483	49,35,561	0·62	55,89,885	21,44,357	—27,98,681	559	70·99	83	130·03	403	75·00
1913-14	4,011·62	83,24,56,549	8,67,13,050	3,67,40,434	4·41	7,50,767	3,74,91,201	4·50	2,35,13,210	85,75,185	+54,02,806	574	54·31	98	99·30	423	57·03
1914-15	4,010·48	85,87,48,950	8,17,13,591	3,05,18,372	3·55	3,43,414	3,08,61,786	3·59	2,53,15,258	85,75,215	—30,28,687	518	59·38	111	96·27	319	62·55
1915-16	4,099·33	86,38,39,993	8,41,06,745	3,60,63,793	4·17	45,324	3,61,09,117	4·18	2,56,65,610	85,88,505	+18,55,002	531	53 86	118	89·33	402	57·12
1916-17	4,057·98	87,37,14,828	9,83,16,25[illegible]	5,10,32,430	5·84	1,72,266	5,12,04,696	5·86	2,46,10,281	91,87,155	+1,74,07,260	615	44·80	131	82·74	465	48·09
1917-18	†3,987·72	87,17,78,646	12,20,98,589	6,97,52,991	8·00	6,10,873	7,03,63,864	8·07	2,59,29,729	91,45,665	+3,52,88,470	769	39·73	160	76·50	580	42·87

* The decrease in net earnings in 1908 was due chiefly to extraordinary charges incurred in the repairs of flood damages, accentuated by a fall in the gross earnings consequent upon the failure of the wheat export trade from Karachi and the diminution of traffic generally owing to famine and extensive breaches of the line caused by floods.

†The decrease is due to the dismantling of the Hyderabad-Badin section.

NORTH WESTERN RAILWAY SYSTEM— *contd.*

Amritsar-Patti railway (5′ 6″ gauge)—

Date of registration of the Company.—12th April 1905.

Progress in opening—

Sections of railway.	Date of opening.	Miles.	Total.
1	2	3	4
Amritsar to Tarn Taran	21-9-06	15·00	
Tarn Taran to Patti	30-12-06	12·05	
Patti to Kasur	4-4-10	27·21	
TOTAL	...	...	54·26

Details of construction—

Permanent-way.—The permanent-way consists of 75-lb. flat-footed British standard steel rails laid on deodar, jarrah, chir and douglas fir sleepers.

Ballast.—The line is ballasted throughout with broken stone.

Fencing.—Station yards only are fenced.

Curves.—The sharpest curve is of 1,910 feet radius.

Gradients.—The ruling gradient is 1 in 200.

Agreements and Contracts—.

Agreement, dated the 21st March 1905, *between the Secretary of State and Messrs. Killick, Nixon and Company of Bombay*, as to the formation and establishment of the Amritsar-Patti Railway Company.

Contract, dated the 22nd May 1905, *between the Secretary of State and the Amritsar-Patti Railway Company*, as to the construction, maintenance, management and working of the Amritsar-Patti railway.

Agreement, dated the 17th March 1909, *between the Secretary of State and the Amritsar-Patti Railway Company*, as to the raising of capital and execution of contract in connection with the construction of the Patti-Kasur extension.

Agreement, dated the 7th May 1909, *between the Secretary of State and the Amritsar-Patti Railway Company*, as to the reduction of the capital amount.

Contract, dated the 7th May 1909, *between the Secretary of State and the Amritsar-Patti Railway Company*, as to the construction, maintenance, management and working of the Patti-Kasur extension as an integral part of the Amritsar-Patti railway.

Railway Board's letter No. 92-994-P., dated the 26th March 1915, sanctioning an additional (nominal Debenture) capital of 10 lakhs.

Contract, dated the 28th October 1915 (supplemental to the contract of 1905 and 1909), *between the Secretary of State and the Amritsar-Patti Railway Company*, as to the adoption of the Government financial year for the preparation of accounts, etc.

Main provisions of agreements and contracts—

(i) *Land.*—Provided by the Government free of cost to the Company, except for quarrying ballast brickfields, other kindred purposes and temporary works.

(ii) *Government aid.*—The Government constructed the line (from funds supplied by the Company whose property it is), and manage, maintain, stock and work it, through the agency of the North Western railway.

By way of rebate the Government allow the Company, in respect of each year, such a sum, up to 45 per cent of the gross earnings from traffic (excluding those derived from the carriage of stores) interchanged between the North Western railway and the Amritsar-Patti railway, as shall, together with the net earnings of the Company, make up an amount equal to an interest for the year at a rate of 5 per cent per annum on the paid-up share capital and at 4¾ per cent. on the amount of debentures, as also, up to the same limit, Rupees 7,200 on account of office expenses and expenses of management and direction. They also allow all such legal expenses as may be properly incurred by the Company and approved by the Secretary of State or the Government of India and as are debitable to Revenue.

(iii) *Terms of working.*— } For management, maintenance, working and provision of rolling-stock,
(iv) *Distribution of profits.*— } the Government retain 45 per cent of the gross earnings in each half-year of the Amritsar-Patti railway; the remainder, constituting the net earnings, is paid to the Company.

But should the net earnings of the Company in any year exceed the minimum amount sufficient to pay a dividend of 5 per cent per annum, on the paid-up share capital and 4¾ per cent. on the amount of debentures, such excess is to be applied towards the payment of office expenses and expenses of management and direction [referred to under (ii)] up to a limit of Rs. 15,000, the balance being divided equally between the Government and the Company.

(v) *Rates and fares.*—To be arranged between the Government and the working agency within the maximum and minimum in force on, and the classification of goods to be in conformity with that of the North Western railway.

(vi) *Special obligations as to the conveyance of.*—
(*a*) Mails, troops, police, high Government officials and Government stores.—
(*b*) Government bullion and coin, and the persons in charge thereof.—
} To be conveyed at the same rates and under the same arrangements as apply to State railways.

(vii) *Power of the Government to determine contract.*—The Government may, by giving twelve months' previous notice of purchase, determine the contract either on the 31st December 1935 or on the 31st December in the last year of any subsequent period of 10 years, by paying to the Company in rupees 25 times the average yearly net earnings of the Company during the three years immediately preceding the date of determination, subject to a limit of 20 per cent. in excess of, but not less than, the total capital expenditure of the Company.

(viii) *Power of the Company to surrender contract.*—Nil.

(ix) *Term of contract* [*if not determined under* (vii)].—None specified.

NORTH WESTERN RAILWAY SYSTEM—*contd.*

Amritsar-Patti railway (5′ 5″ gauge)—*concld.*

Statistics of working—

Year.	Mileage open at end of each year.	Total capital outlay, including suspense, to end of each year, *i.e.*, outlay on (*i*) lines open and (*ii*) lines partly or wholly under construction.	Gross earnings.	Net earnings.	Percentage of net earnings on total capital outlay given in column (3).	Government share of surplus profits.	Total income [column 5 + column 7].	Percentage of total income on total capital outlay in column (3).	Earnings per mile per week.	Proportion of expenses to earnings.
1	2	3	4	5	6	7	8	9	10	11
	Miles.	Rs.	Rs.	Rs.		Rs.	Rs.		Rs.	
1906 .	27·49	11,90,964	15,368	8,452	0·71	...	8,452	0·71	69	45·00
1907 .	27·49	14,19,465	1,61,280	88,704	6·25	3,726	84,978	5·99	113	45·00
1908 .	27·49	14,87,400	1,79,461	98,703	6·63	4,852	93,851	6·24	126	45·00
1909 .	27·60	17,88,129	2,18,369	1,20,103	6·72	15,957	1,04,146	5·82	152	45·00
1910 .	54·26	26,67,469	3,64,322	2,00,378	7·51	30,922	1,69,456	6·35	146	45·00
1911 .	54·26	28,68,452	4,70,792	2,58,936	9·02	49,275	2,09,661	7·31	167	45·00
1912 .	54·26	28,70,826	5,24,419	2,88,431	10·03	61,317	2,27,114	7·91	186	45·00
1st qr.. of 1913.	54·26	28,85,320	1,48,642	81,753	2·83	...	*81,753	2·83	210	45·00
1913-14 .	54·26	29,55,802	7,41,391	4,07,765	13·79	78,965	3,28,800	11·12	263	45·00
1914-15 .	54·26	32,49,902	7,02,381	3,86,310	11·89	1,19,964	2,66,346	8·19	249	45·00
1915-16 .	54·26	34,04,702	6,79,328	3,73,630	10·97	1,49,118	2,24,512	6·59	239	45·00
1916-17 .	54·26	33,96,686	6,69,598	3,68,278	10·84	87,722	2,80,556	8·26	237	45·00
1917-18 .	54·26	34,05,991	4,98,312	2,74,071	8·05	40,982	2,33,089	6·84	177	45·00

Hoshiarpur Doab Branch railways (Jullundur-Mukerian and Phagwara-Rahon railways) (5′ 6″ gauge)—

Date of registration of the Company.—27th February 1914.

The construction of the Jullundur-Mukerian and Phagwara-Rahon railways by the Hoshiarpur Doab Branch Railways Company was authorised by the Railway Board in their letter No. $\frac{657}{970}$-R.C., dated the 13th March 1914.

Progress in opening—

Sections of railway.	Date of opening.	Miles.	Total.
1	2	3	4
JULLUNDER-MUKERIAN RAILWAY—			
Jullundur City to Tanda Urmar.	1-1-15	25·27	
Tanda Urmar to Dasuya	1-2-15	9·45	
Dasuya to Mukerian	1-3-15	10·09	
TOTAL JULLUNDUR-MUKERIAN RAILWAY .	...	...	44·81
PHAGWARA-RAHON RAILWAY—			
Main line—			
Phagwara to Kariah	1-4-15	17·84	
Kariah to Rahon	27-5-15	7·95	
			25·79
Jaijon extension—			
Nawashahr to Jaijon	3-5-17	19·42	19·42
TOTAL PHAGWARA-RAHON RAILWAY .	...	...	45·21

Details of construction—

Permanent-way.—The permanent-way on the two railways consists of 58½-lb. and 60-lb. flat-footed steel rails on deodar sleepers. The 58½-lb. rails are in all respects, except in the width of foot, similar to the 60-lb. rails which are of British Standard section.

Ballast.—Both the railways are ballasted with stone. The facing points, crossings, passenger platforms, level crossings, bridge approaches and sharper curves on the Phagwara-Rahon railway are ballasted with brick.

Fencing.—Fencing has been provided only at first class level crossings for a short distance on each side of the gates.

Curves.—The sharpest curve is of 1,910 feet radius.

Gradients.—The ruling gradient on the Jullundur-Mukerian railway is 1 in 300 and on the Phagwara-Rahon railway, 1 in 500 on the main line and 1 in 100 on the Jaijon extension.

Contract—

Dated the 21st February 1917, *between the Secretary of State and the Hoshiarpur Doab Branch Railways Company*, as to the construction, maintenance, management and working of the Hoshiarpur Doab Branch railways (Jullundur-Mukerian and Phagwara-Rahon railways.)

Railway Board's letter No. 20-P., dated the 22nd January 1916, authorising to increase the nominal capital of the Company from Rs. 50 lakhs to Rs. 65 lakhs and sanctioning an additional allowance of Rs. 2,000 per annum for administrative charges of the Company in respect of the Jaijon entension.

[NOTE.—A supplemental contract extending the terms of the contract of 21st February 1917 to the Jaijon extension is under consideration.]

NORTH WESTERN RAILWAY SYSTEM—*contd.*

Hoshiarpur Doab Branch railways (Jullundur-Mukerian and Phagwara-Rahon railways) (5′ 6″ gauge)—*concld.*

Main provisions of contract—

(i) *Land.*—Land in British territory provided by Government free of cost to the Company.

(ii) *Gorernment aid.*—By way of rebate Government allow to the Company, in respect of each year, such a sum, not exceeding the net earnings of the North Western railway derived from all traffic, except stores for maintenance and working, interchanged between the North Western railway and the said railways, as shall, together with the net earnings of the Company, be equal to the interest for the year at a rate of 5 per cent per annum on the share capital of the Company for the time being paid up. They also allow, subject to the conditions mentioned in clause 6, Schedule II of the agreement, Rs. 12,000 and such other actual expenses for or towards the office expenses and expenses of management, and direction of the Company as are specified in that clause, as also all such legal expenses as may be properly incurred by the Company and approved by the Secretary of State or the Government of India and as are under the provisions of the agreement debitable to Revenue.

(iii) *Terms of working.*—For management, maintenance, working and use of rolling-stock, Government retain 50 per cent of the gross earnings of these railways in each half-year, the remainder constituting the net earnings is paid to the Company.

(iv) *Distribution of profits.*—Should the net earnings of the Company in any year exceed the minimum amount sufficient to pay a dividend of 5 per cent per annum, such excess is to be applied towards the payment of the office expenses and expenses of management and direction of the Company stated under (ii), the balance, if any, being divided equally between the Government and the Company, provided that if the surplus profits are insufficient to meet the administration charges, the difference will be paid to the Company by the working agency out of the stipulated amount retained by the latter as working expenses.

(v) *Rates and fares.*—To be sanctioned by the Secretary of State within the maximum and minimum in force on, and the classification of goods to be in conformity with that of, the North Western railway.

(vi) *Special obligations as to the conveyance of.*—

(*a*) Mails, troops, police, high Government officials and Government stores.—
(*b*) Government bullion and coin, and the persons in charge thereof.—

} To be conveyed in all respects as far as practicable in the same manner and subject to the same regulations and control by the Secretary of State as the same are conveyed on the North Western railway.

(vii) *Power of the Government to determine contract.*—Government may, on giving 12 months' previous notice of purchase in writing, determine the contract on the 31st March 1946 or on the 31st March in the last year of any subsequent period of 10 years by paying to the Company in rupees, 25 times the average of the yearly net earnings (excluding payments on account of rebate) during the 3 years, immediately preceding the date of determination, subject to a limit of 20 per cent in excess of, but not less than, the total capital expenditure of the Company.

The Government may also, by giving 12 months' previous notice of "special purchase" determine the contract at any time in the following cases, by paying in rupee currency to the Company 25 times the average of the yearly net earnings (excluding payments on account of rebate) during the 3 years preceding the date of determination or 115 per cent of the total capital expenditure of the company whichever may be the greater.—

(*a*) when it is considered desirable to alter the gauge of the railways,

(*b*) when it is considered desirable to convert the railways into a line of through communication,

(*c*) when it is considered desirable to extend the said railways and the Company fails to raise additional capital for such extension within 6 months from date of receipt of the formal requisition from Government.

(viii) *Power of the Company to surrender contract.*—Nil.

(ix) *Term of the contract.*—From 21st February 1917 to 31st March 1946 and thereafter as noted under (*vii*).

Statistics of working—

Year.	Mileage open at end of each year.		Total capital outlay, including suspense, to end of each year, i.e., outlay on (*i*) lines open and (*ii*) lines partly or wholly under construction.		Gross earnings.		Net earnings.		Percentage of net earnings on total capital outlay given in columns 4 and 5.		Rebate and Administration charges from North Western railway (+), or share of surplus profits payable to Government (−).	Total income.	Percentage of total income on total capital outlay given in columns 4 and 5.	Earnings per mile per week.		Proportion of expenses to earnings.
	J. M. Ry.	P. R. Ry.	J. M. Ry.	P. R. Ry.	J. M. Ry.	P. R. Ry.	J. M. Ry.	P. R. Ry.	J. M. Ry.	P. R. Ry.				J. M. Ry.	P. R. Ry.	
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	13	17
1914-15	45·40	...	19,88,437	...	2,795	...	1,397	...	0·07	..	...	1,397	0·07	5	...	50·00
1915-16	44·80	25·84	31,78,124	12,97,446	1,45,120	1,26,562	72,559	63,281	2·28	4·87	...	1,35,840	3·03	62	94	50·00
1916-17	44·81	25·79	31,47,561	23,23,847	2,11,597	1,89,481	1,06,799	94,241	3·36	4·06	+24,960	2,25,000	4·11	91	140	50·00
1917-18	44·81	45·21	28,89,137	25,75,826	2,04,671	1,93,372	1,02,335	96,686	3·54	3·75	+92,430	2,91,451	5·33	88	85	50·00

NORTH WESTERN RAILWAY SYSTEM—*contd.*

Jammu and Kashmir (Native State section) (5′ 6″ gauge)—

Progress in opening—

Section of railway.	Date of opening.	Miles.	Total.
1	2	3	4
Frontier of the Kashmir State to the left bank of the Tawi river near Jammu.	15-3-90	16·01	16·01

Details of construction—

Permanent-way.—The permanent-way consists of 75-lb. flat-footed steel rails laid on transverse sleepers of deodar.

Ballast.—The line is ballasted throughout with broken stone.

Fencing.—The line is unfenced except at Sialkot station.

Curves.—The sharpest curve is of 2,865 feet radius.

Gradients.—The ruling gradient is 1 in 200.

Agreements—

Dated the 19th April 1913, having effect from 1st June 1912, *between the Government of India and the Kashmir Durbar*, as to construction and working.

Corrigendum, dated 14th September 1915, *between the Government of India and the Kashmir Durbar*, modifying the agreement of 19th April 1913.

Main provisions of agreement—

(i) *Land.*—Provided free of cost by the Durbar and the Government in their respective territories.

(ii) *Government aid.*—The section was constructed (from funds supplied by the Kashmir Durbar, whose property it is), and is managed, maintained, stocked and worked by the North Western railway.

By way of rebate the Government allow to the Durbar a payment on traffic interchanged with the North Western railway to such extent, as, together with the share of net earnings attributable to the section, will afford a total dividend of 3½ per cent per annum on the actual capital expenditure to end of each half-year, subject to the proviso that such rebate in no case exceeds the North Western railway's net earnings from traffic interchanged with the section.

(iii) *Terms of working.*—
(iv) *Distribution of profits.*— } For management, maintenance, use of rolling-stock and working, the North Western railway retains 55·50 per cent of the gross earnings of the section, the remaining 44·50 per cent together with rebate being credited to the Durbar.

(v) *Rates and fares.*—To be such as are from time to time in force on the main line of the North Western railway.

(vi) *Special obligations as to the conveyance of.*—

(*a*) Mails, troops, police, high Government officials and Government stores.—
(*b*) Government bullion and coin, and the persons in charge thereof.— } To be conveyed on the same general conditions as those in force on the main line of the North Western railway.

(*c*) Services to the Durbar.—As in clauses 15, 16 and 17 of the agreement.

(vii) *Power of the Government to determine agreement.*—
(viii) *Power of the Durbar to surrender agreement.*—
(ix) *Term of agreement.*— } The agreement is terminable on six months' notice by either party.

Statistics of working. (Those for the periods prior to 1908 will be found in Appendix 38 to the Railway Administration Report for 1907.)—

Year.	Mileage open at end of each year.	Total capital outlay, including expenditure to end of each year, i.e., outlay on (i) lines open and (ii) lines partly or wholly under construction.	Gross earnings.	Net earnings.	Percentage of net earnings on total capital outlay given in column (3).	Rebate from North Western railway.	Total income.	Percentage of total income on total capital outlay given in column (3).	Earnings per mile per week.	Proportion of expenses to earnings.
1	2	3	4	5	6	7	8	9	10	11
	Miles	Rs.	Rs.	Rs.		Rs.	Rs.		Rs.	
1908 .	15·98	9,93,606	85,290	37,999	3·82	...	37,999	3·82	103	55·50
1909 .	15·98	10,01,019	83,927	37,347	3·70	...	37,347	3·70	101	55·50
1910 .	15·79	10,10,234	86,918	38,679	3·82	...	38,679	3·82	106	55·50
1911	15·79	10,14,336	98,823	43,977	4·33	...	43,977	4·33	120	55·50
1912 .	15·79	10,27,239	81,400	36,223	3·50	...	36,223	3·50	99	55·50
1st qr. of 1913.	15·79	10,28,739	20,398	9,077	0·88	...	9,077	0·88	99	55·50
1913-14 .	16·01	10,28 643	1,15,662	51,470	5·00	...	51,470	5·00	140	55 50
1914-15 .	16·01	10,50 361	1,04,032	46,294	4·41	...	46,294	4·41	125	55·50
1915-16 .	16·01	10,52,682	1,36,203	60,611	5·76	...	60,611	5·76	163	55·50
1916-17 .	16 01	10,54,077	1,21,600	54,112	5·13	...	54,112	5·13	146	55·50
1917-18 .	16·01	10,60,116	1,11,523	49,628	4·68	...	49,628	4·68	134	55 50

NORTH WESTERN RAILWAY SYSTEM—*contd.*

Khanpur-Chachran railway (5′ 6″ gauge)—

Progress in opening—

Section of railway.	Date of opening.	Miles.	Total.
1	2	3	4
Khanpur to Chachran	2-7-11	22·02	22·02

Details of construction—

Permanent-way.—The permanent-way consists of 60-lb. flat-footed steel rails laid on jarrah sleepers.
Ballast.—The line is ballasted with brick and stone.
Fencing.—The line is not fenced.
Curves.—The sharpest curve is of 1,910 feet radius.
Gradients.—The ruling gradient is 1 in 500.

Agreement—

Dated the 21st August 1912 (having effect from the 1st January 1911), *between the Secretary of State and the Bahawalpur Durbar*, as to the construction, maintenance and working of the Khanpur-Chachran railway by the North Western railway.

Corrigendum (having effect from 1st April 1913) to the agreement of 21st August 1912, as to the adoption of the Government financial year for the preparation of accounts.

Main provisions of agreement—

(i) *Land.*—To be provided free of cost by the Bahawalpur Durbar, both during and after construction.

(ii) *Government aid.*—The line was constructed by the Government (from funds supplied by the Bahawalpur Durbar, whose property it is), and is managed, maintained, stocked and worked, through the agency of the North Western railway as if it were part of its system.

By way of rebate Government allow to the Durbar a sum not exceeding in any year the net earnings of the North Western railway from traffic interchanged with the Khanpur-Chachran branch railway, excluding the net earnings from carriage of railway stores, as shall, together with the net earnings of the branch, make up an amount equal to interest at 3 per cent per annum on the actual expenditure charged in the capital account of the branch.

(iii) *Terms of working.*—
(iv) *Distribution of profits.*—
} For management, maintenance, use of rolling-stock and working the North Western railway retains 50 per cent of the gross earnings of the branch, the balance being paid to the Durbar.

(v) *Rates and fares.*—To be the same as may, from time to time, be in force on the North Western railway.

(vi) *Special obligations as to the conveyance of.*—
(*a*) Mails, troops, police, high officials and stores of both the Government and the Durbar.—
(*b*) Government and Durbar bullion and coin, and the persons in charge thereof.—
} To be carried on the same general conditions and at the same rates as may for the time being be in force on the North Western railway.

(vii) *Power of the Government to determine agreement.*—
(viii) *Power of the Durbar to surrender agreement.*—
} The agreement is terminable on the 1st January or 1st July in any year after 1935, on six months' previous notice given by either party to the other. The Government may also determine the agreement at any time, on six months' notice, should either the North Western railway or the Bahawalpur Durbar fail to observe their respective obligations.

Upon the determination of the agreement the North Western railway shall give to the Bahawalpur Durbar possession of the Khanpur-Chachran railway, together with all its belongings and moneys then payable to it, after which the Bahawalpur Durbar shall indemnify the North Western railway against all debts and liabilities as may have been incurred and then be subsisting on behalf of the Khanpur-Chachran railway.

(ix) *Term of contract.*—From the 1st January 1911 until 1935, and thereafter as noted under (viii).

Statistics of working—

Year.	Mileage open at end of each year.	Total capital outlay, including suspense, to end of each year, i.e., outlay on (i) lines open and (ii) lines partly or wholly under construction.	Gross earnings.	Net earnings.	Percentage of net earnings on total capital outlay given in column (3).	Rebate from North Western railway.	Total income.	Percentage of total income on total capital outlay given in column (3).	Earnings per mile per week.	Proportion of expenses to earnings.
1	2	3	4	5	6	7	8	9	10	11
	Miles.	Rs.	Rs.	Rs.		Rs.	Rs.		Rs.	
1911 .	22·02	13,95,947	12,861	6,431	0·46	..	6,431	0·46	22	50·00
1912 .	22·02	13,84,971	28,854	14,426	1·01	13,721	28,147	2·03	25	50·00
1st qr. of 1913	22·02	13,95,029	6,720	3,360	0·24	13,567	16,927	1·21	23	50·00
1913-14 .	22·02	14,00,387	36,875	18,437	1·31	17,937	36,374	2·60	32	50·00
1914-15 .	22·02	14,00,328	36,516	18,257	1·30	24,179	42,436	3·03	32	50·00
1915-16 .	22·02	13,99,937	32,815	16,407	1·17	37,794	54,201	3·87	29	50·00
1916-17 .	22·02	14,00,003	39,729	19,865	1·42	22,134	41,999	3·00	35	50·00
1917-18 .	22 02	14,00,003	33,260	16,630	1·19	25,370	42,000	3·00	29	50·00

NORTH WESTERN RAILWAY SYSTEM—*contd.*

Ludhiana-Dhuri-Jakhal railway (5′ 6″ gauge)—

Progress in opening—

Section of railway.	Date of opening.	Miles.	Total.
1	2	3	4
Ludhiana *vid* Dhuri to Jakhal	10-4-01	78·65	78·65

Details of construction—

Permanent-way.—The permanent-way consists of 75-lb. flat-footed steel rails laid on transverse sleepers of deodar.

Ballast.—The line is ballasted throughout with brick, stone and kunkur.

Fencing.—Only station yards and about 100 feet on each side of level crossings are fenced.

Curves.—The sharpest curve is of 1,364 feet radius.

Gradients.—The ruling gradient is 1 in 400.

Agreement—

Dated the 6th September 1899, *between the Secretary of State and the Maler Kotla and Jhind Durbars* as to the construction, maintenance and working.

Main provisions of agreement—

(i) *Land.*—Provided free of cost by the Government in the case of British territory and by the Durbars concerned in the case of Native States' territory up to the date of the agreement of 1899; thereafter all land provided by the Maler Kotla and Jhind Durbars is debited to capital.

(ii) *Government aid.*—The Government constructed the line (from funds supplied in the ratio of $\frac{4}{5}$ths, and $\frac{1}{5}$th, respectively, by the Jhind and Maler Kotla Durbars, whose property it is), and manage, maintain, stock and work it, through the agency of the North Western railway, as part of its system.

(iii) *Terms of working.*—
(iv) *Distribution of profits* — } For management, maintenance, provision of rolling-stock and working the North Western railway retain 55 per cent, which has, with effect from the 1st January 1913, in pursuance of Railway Board's letter No 192-R.T, dated the 29th January 1913, been reduced to 52 per cent, of the gross earnings; and the balance is paid to the Jhind and Maler Kotla Durbars to be divided between them in the ratio of $\frac{4}{5}$ths to the former and $\frac{1}{5}$th to the latter.

(v) *Rates and fares.*—To be the same as may, from time to time, be in force on the North Western railway.

(vi) *Special obligations as to the conveyance of.*—
(*a*) Mails, troops, police, high officials and stores, both of the Government and the Durbars.—
(*b*) Bullion and coin of Government and the Durbars, and the persons in charge thereof.— } To be carried on the same general conditions and at the same rates as may for the time being be in force on the North Western railway.

(vii) *Power of the Government to determine agreement.*—
(viii) *Power of the Durbars to surrender agreement.*—
(ix) *Term of contract.*— } Either party may determine the agreement on the 1st January or 1st July in any year, by giving six months' previous notice to the other. The Government may also determine the contract at any time on six months' notice in writing should either the North Western railway or the Durbars fail to observe their respective obligations. Upon the determination of the agreement the North Western railway will give to the Maler Kotla and Jhind Durbars possession of the railway, all its belongings and moneys then payable to them, after which the Durbars will indemnify the North Western railway against all debts and liabilities as may have been incurred and then be subsisting on behalf of the Ludhiana-Dhuri-Jakhal railway.

Statistics of working (Those for the periods prior to 1908 will be found in Appendix 38 to the Railway Administration Report for 1907.)

Year.	Mileage open at end of each year.	Total capital outlay, including suspense, to end of each year, *i.e.*, outlay on (*i*) lines open, and (*ii*) lines partly or wholly under construction.	Gross earnings.	Net earnings.	Percentage of net earnings on total capital outlay given in column (3).	Earnings per mile per week.	Proportion of expenses to earnings.
1	2	3	4	5	6	7	8
	Miles.	Rs.	Rs.	Rs.		Rs.	
1908	78·65	41,86,647	6,24,593	2,81,067	6·71	153	55·00
1909	78·65	41,89,158	6,13,490	2,76,070	6·59	150	55·00
1910	78·65	41,88,289	8,30,707	3,73,818	8·92	203	55·00
1911	78·65	41,92,181	6,55,093	2,94,792	7·03	160	55·00
1912	78 65	41,91,995	7,16,119	3,22,253	7·68	175	55·00
1st qr. of 1913 . . .	78 65	41,96,109	2,00,611	90,275	2·15	196	55·00
1913-14	78·65	42,19,576	8,92,734	4,34,531	10·30	218	51·33
1914-15	78·65	42,37,467	7,49,354	3,59,690	8·49	183	52·00
1915-16	78·65	42,53,978	9,08,985	4,36,313	10·26	221	52·00
1916-17	78·65	42,68,185	8,58,406	4,12,035	9·61	209	52·00
1917-18	78·65	43,17,455	7,62,036	3,65,778	8·47	186	52·00

NORTH WESTERN RAILWAY SYSTEM—*contd.*

Mandra-Bhaun railway (5' 6" gauge)—

Date of registration of the Company.—13th November 1913.

The construction of this line by the North Western railway for the Mandra-Bhaun Railway Company was sanctioned under Railway Board's Notification No. 355, dated the 3rd December 1913.

Progress in opening—

Sections of railway.	Date of opening.	Miles.	Total.
1	2	3	4
Mandra to Dhudial	1-5-15	27·25	
Dhudial to Chak Naurang	1-6-15	4·25	
Chak Naurang to Chakwal	1-9-15	7·86	
Chakwal to Bhaun	15-1-16	7·02	
TOTAL	...	...	46·38

Details of construction—

Permanent-way.—The permanent-way consists of second-hand 60-lb. flat-footed steel rails laid on creopine, Douglas fir and second-hand steel trough sleepers.

Ballast.—The line is ballasted with stone.

Fencing.—The line is unfenced.

Curves.—The sharpest curve is of 955 feet radius.

Gradients.—The ruling gradient is 1 in 100 compensated.

Contract—

Dated the 15th October 1914, *between the Secretary of State and the Mandra-Bhaun Railway Company*, as to the construction, maintenance, management and working of the Mandra-Bhaun railway.

Main provisions of contract—

(i) *Land*—Provided by the Government free of cost to the Company.

(ii) *Government aid*—The line was constructed by the Government (from funds supplied by the Mandra-Bhaun Railway Company whose property it is), and is managed, maintained, stocked and worked through the agency of the North Western railway as if it were part of its system.

By way of rebate the Government allow to the Company, in respect of each year, such a sum, not exceeding the net earnings of the North Western railway derived from all traffic (except stores) interchanged between the North Western railway and the said railway as shall, together with the net earnings of the Company, be equal to the interest for the year at a rate of 5 per cent per annum on the share capital of the Company for the time being paid up. They also allow, subject to the conditions mentioned in clause 7, schedule II, of the agreement, Rs. 7,200 and such other actual expenses, for or towards the office expenses, expenses of management and direction of the Company, as are specified in that clause as also all such.

Legal expenses as may be properly incurred by the Company and approved by the Secretary of State or the Government of India and as are debitable to revenue.

(iii) *Terms of working.*—
(iv) *Distribution of profits.*— For management, maintenance, working and use of rolling-stock, the Government retain 50 per cent of the gross earnings in each half-year of the Mandra-Bhaun railway; the remainder, constituting the net earnings, is paid to the Company.

But should the net earnings of the Company in any year exceed the minimum amount sufficient to pay a dividend of 5 per cent per annum, such excess is to be applied towards the payment of office expenses and expenses of management and direction of the Company for the year referred to under (*ii*), the balance, if any, being divided equally between the Government and the Company. Provided that if the surplus profits are insufficient to meet the administration charges, the balance will be paid to the Company by the Working Agency out of the stipulated amount retained by the Working Agency as working expenses.

(v) *Rates and fares.*—To be sanctioned by the Secretary of State within the maximum and minimum in force on, and the classification of goods to be in conformity with that of, the North Western railway.

(vi) *Special obligations as to the conveyance of.*—
(*a*) Mails, troops, police, high Government officials and Government stores.—
(*b*) Government bullion and coin, and the persons in charge thereof.— To be conveyed in all respects as far as practicable in the same manner and subject to the same regulations and control by the Secretary of State as the same are conveyed over the North Western railway.

(vii) *Power of the Government to determine contract.*—The Government may, by giving 12 months' previous notice in writing of purchase, determine the contract either on the 31st day of March 1947 or on the 31st day of March of the last year of any subsequent period of 10

NORTH WESTERN RAILWAY SYSTEM—*contd.*

Mandra-Bhaun railway (5′ 6″ gauge)—*concld.*

Main provisions of contract—*concld.*

years, by paying to the Company in rupees 25 times the average of the yearly net earnings (excluding payments on account of rebate) during the 3 years immediately preceding the date of determination, subject to a limit of 20 per cent in excess of, but not less than, the total capital expenditure of the Company.

The Government may also, by giving 12 months' previous 'notice of special purchase', determine the contract at any time in the following cases :—

(*a*) when it is considered desirable to alter the gauge of the railway ;

(*b*) when it is considered desirable to convert the railway into a line of through communication ; and

(*c*) when it is considered desirable to extend the railway and the Company fails to raise additional capital for such extension within 6 months from receipt of the formal requisition from the Government

If the contract be determined 'by notice of special puchase' the Government will pay to the Company in rupees 25 times the average of the yearly net earnings (excluding payments on account of rebate) during the 3 years preceding the date of determination or 115 per cent. of the total capital expenditure, whichever may be the greater.

(viii) *Power of the Company to surrender contract.*—Nil.

(ix) *Term of contract.*—From 15th October 1914 to 30th March 1947 and thereafter as noted under (vii).

Statistics of working—

Year	Mileage open at end of each year.	Total capital outlay, including suspense, to end of each year, *i.e*, outlay on (*i*) lines open, and (*ii*) lines partly or wholly under construction.	Gross earnings.	Net earnings.	Percentage of net earnings on total capital outlay given in column (3).	Rebate and Administration charges from North Western Railway (+), or share of surplus profits payable to Government (—).	Total income (column 5 + or — column 7).	Percentage of total income on total capital outlay given in column (3).	Earnings per mile per week.	Proportion of expenses to earnings.
1	2	3	4	5	6	7	8	9	10	11
	Miles.	Rs.	Rs.	Rs.		Rs.	Rs.	Rs.	Rs.	
1915-16	46·38	21,35,280	20,484	10,242	0·48	...	10,242	0·42	8	50·00
1916-17	46·38	23,84,347	1,74,214	87,107	3·65	+ 31,162	1,18,269	4·96	72	50·00
1917-18	46·38	28,96,775	1,71,894	85,947	3·58	+ 60,224	1,46,171	6·10	71	50·00

Rajpura-Bhatinda railway (5′ 6″ gauge)—

Progress in opening—

Sections of railway.	Date of opening.	Miles.	Total.
1	2	3	4
Rajpura to Patiala	1-11-84	16·00	
Patiala to Bhatinda	13-10-89	92·04	
TOTAL	...	...	108·04

Details of construction—

Permanent-way.—The line from Rajpura to Patiala is laid with 68-lb. bull-headed steel rails on deodar sleepers, and from Patiala to Bhatinda with 75-lb. flat-footed steel rails on deodar, chir and jarrah sleepers.

Ballast.—The line is ballasted throughout with brick and stone.

Fencing.—The line is fenced between Rajpura and Patiala at station yards, and 100 feet on each side of level crossings between Patiala and Bhatinda.

Curves.—The sharpest curve is of 1,146 feet radius.

Gradients.—The ruling gradient is 1 in 250.

Agreement—

Dated the 30th January 1893, *between the Secretary of State and the Patiala Durbar*, as to management, maintenance and working of the Rajpura-Bhatinda railway.

NORTH WESTERN RAILWAY SYSTEM—*contd.*

Rajpura-Bhatinda railway (5′ 6″ gauge)—*concld.*

Main provisions of agreement—

(i) *Land.*—Land for original construction was provided free of cost by Government in British territory and by the Patiala Durbar in their territory; the cost of that provided by the Durbar after 13th October 1889 (the date on which the agreement came into force) is debited to the capital account.

(ii) *Government aid.*—The line, which is the property of the Patiala Durbar, is managed, maintained, stocked and worked by the Government through the agency of the North Western railway as part of its system from the 13th October 1889.

(iii) *Terms of working.*—
(iv) *Distribution of profits.*— } For management, maintenance, provision of rolling-stock and working, the North Western railway retains 55 per cent of the gross earnings (reduced to 52 per cent from 1st January 1904, in accordance with the Government of India, Public Works Department, No. $\frac{817}{818}$ R.T., dated the 5th October 1903, to the address of the $\frac{\text{Government of the Punjab}}{\text{Manager, North Western railway}}$) and the balance is paid to the Patiala Durbar.

(v) *Rates and fares.*—To be the same as may, from time to time, be in force on the North Western railway.

(vi) *Special obligations as to the conveyance of.*—

(*a*) Mails, troops, police, high officials and stores both of the Government and of the Durbar.—
(*b*) Government and Durbar bullion and coin, and the persons in charge thereof.— } To be carried on the same general conditions and at the same rates as may for the time being be in force on the North Western railway.

(vii) *Power of the Government to determine agreement.*—
(viii) *Power of the Durbar to surrender agreement.*—
(ix) *Term of agreement.*— } The agreement is terminable on the 1st January or the 1st July in any year on six months' previous notice in writing being given by either party to the agreement to the other. The Government may also determine the contract at any time on six months' notice in writing, should either the North Western railway, or the Patiala Durbar, fail to observe their respective obligations. Upon the determination of the agreement the North Western railway will give to the Patiala Durbar possession of the railway, all its belongings and moneys then payable to it, after which the Patiala Durbar will indemnify the North Western railway against all debts and liabilities as may have been incurred and then be subsisting on behalf of the Rajpura-Bhatinda railway.

Statistics of working (Those for the periods prior to 1908 will be found in Appendix 38 to the Railway Administration Report for 1907.)

Year.	Mileage open at end of each year.	Total capital outlay, including suspense, to end of each year, *i.e.*, outlay on (i) lines open, and (ii) lines partly or wholly under construction.	Gross earnings.	Net earnings.	Percentage of net earnings on total capital outlay given in column (3).	Earnings per mile per week.	Proportion, of expenses to earnings.
1	2	3	4	5	6	7	8
	Miles.	Rs.	Rs.	Rs.		Rs.	
1908	107·05	68,52,951	13,74,351	6,59,689	9·63	247	52·00
1909	106·45	68,69,482	13,15,393	6,31,388	9·19	237	52·00
1910	106·45	68,92,203	13,91,108	6,67,731	9·68	251	52·00
1911	107·01	69,89,254	16,30,470	7,82,625	11·20	293	52·00
1912	108·04	70,42,212	20,30,809	9,74,788	13·84	363	52·00
1st qr. of 1913. .	108·04	70,73,101	4,35,345	2,08,966	2·95	310	52·00
1913-14 . . .	108·04	71,54,898	19,79,514	9,50,167	13·28	352	52·00
1914-15 . . .	108·04	72,49,445	13,42,862	6,44,574	8·89	239	52·00
1915-16 . . .	108·04	72,75,107	16,73,791	8,03,419	11·04	296	52·00
1916-17 . . .	108·04	73,11,085	18,09,610	8,68,613	11·88	321	52·00
1917-18 . . .	108·04	75,78,443	21,63,806	10,38,627	13·70	385	52·00

NORTH WESTERN RAILWAY SYSTEM—*contd*

Sialkot-Narowal railway (5′ 6″ gauge)—

Date of registration of the Company.—21st July 1914.

The construction of this line by the North Western railway for the Sialkot-Narowal Railway Company was sanctioned under Railway Board's Notification No. 19, dated the 26th January 1915.

Progress in opening—

Sections of railway.	Date of opening.	Miles.	Total.
1	2	3	4
Sialkot to Kila Sobha Singh	10-11-15	27·16	
Kila Sobha Singh to Narowal	10-1-16	11·00	
TOTAL	...	...	38·16

Details of construction—

Permanent-way.—The permanent-way consists of new 60-lb. flat-footed British standard section steel rails laid on new wooden sleepers.

Ballast.—The line is ballasted with shingle with a bottom layer of brick ballast.

Fencing.—The line is unfenced.

Curves.—The sharpest curve is of 2,865 feet radius.

Gradients.—The ruling gradient is 1 in 500.

Contract—

Dated the 15th February 1917, *between the Secretary of State for India and the Sialkot-Narowal Railway Company*, as to construction, maintenance, management and working of the Sialkot-Narowal railway.

Main provisions of contract—

(i) *Land.*—Land in British territory provided by Government free of cost to the Company.

(ii) *Government aid.*—The line was constructed by the Government (from funds supplied by the Sialkot-Narowal Railway Company whose property it is) and is managed, maintained, stocked and worked by Government through the agency of the North Western railway as if it were a part of its system.

By way of rebate Government allow to the Company in respect of each year, such a sum not exceeding the net earnings of the North Western railway derived from all traffic, except stores for maintenance or working, interchanged between the North Western railway and the said railway, as shall, together with the net earnings of the Company, be equal to the interest for the year at a rate of 5 per cent per annum on the share capital of the Company for the time being paid up. They also allow, subject to the conditions mentioned in clause 7, Schedule II, of the agreement, Rs. 7,200 and such other actual expenses for or towards the office expenses and expenses of management and direction of the Company as are specified in that clause; as also all such legal expenses as may be properly incurred by the Company and approved by the Secretary of State or the Government of India and as are, under the provisions of the contract, debitable to Revenue.

(iii) *Terms of working.*—
(iv) *Distribution of profits.*— } For management, maintenance, working and use of rolling-stock, Government retain the same percentage of gross earnings for which the North Western Railway system including this railway is worked subject to a maximum of 50 per cent of the gross earnings of the said railway, the remainder constituting the net earnings is paid to the Company.

Should the net earnings of the Company in any year exceed the minimum amount, sufficient to pay a dividend of 5 per cent per annum, such excess is to be applied towards the payment of the office expenses and expenses of management and direction of the Company stated under (ii), the balance, if any, being divided equally between the Government and the Company. Provided that if the surplus profits are insufficient to meet the Administration charges the difference will be paid to the Company by the working agency out of the stipulated amount retained by the latter as working expenses.

NORTH WESTERN RAILWAY SYSTEM—*contd.*

Sialkot-Narowal railway (5′ 6″ gauge)—*concld.*

Main provisions of contract—*concld.*

(v) *Rates and fares.*—To be sanctioned by the Secretary of State within the maximum and minimum in force on, and the classification of goods to be in conformity with that of, the North Western railway.

(vi) *Special obligations as to the conveyance of*—

(*a*) Mails, troops, police, high Government officials and Government stores—

(*b*) Government bullion and coin and the persons in charge thereof—

} To be carried, in all respects as far as practicable, in the same manner and subject to the same regulations and control by the Secretary of State as the same are carried on the North Western railway.

(vii) *Power of the Government to determine contract.*—Government may, by giving 12 months' previous notice of purchase, determine the contract on the 31st March 1946 or on the 31st March in the last year of any subsequent period of 10 years by paying to the Company in rupees 25 times the average of the yearly net earnings (excluding payments on account of rebate) during the 3 years immediately preceding the date of determination, subject to a limit of 20 per cent in excess of but not less than, the total capital expenditure of the Company. Government may also by giving 12 months' previous notice of "special purchase" determine the contract at any time in the following cases :—

(*a*) when it is considered desirable to alter the gauge of the railway ;

(*b*) when it is considered desirable to convert the railway into a line of through communication ; and

(*c*) when it is considered desirable to extend the said railway and the Company fails to raise additional capital for such extension within 6 months from date of receipt of the formal requisition from Government.

If the contract shall be determined by notice of "Special purchase" the Government will pay to the Company in rupees 25 times the average of the yearly net earnings (excluding payments on account of rebate) during the 3 years preceding the date of determination or 115 per cent of the total capital expenditure of the Company whichever may be the greater.

(viii) *Power of the Company to surrender contract.*—Nil.

(ix) *Term of the contract.*—From 15th February 1917 to 31st March 1946 and thereafter as noted under (vii).

Statistics of working—

Year.	Mileage open at end of each year.	Total capital outlay, including suspense, to end of each year, *i.e.*, outlay on (*i*) lines open and (*ii*) lines partly or wholly under construction.	Gross earnings.	Net earnings.	Percentage of net earnings on total capital outlay given in column (3).	Rebate and Administration charges from the N. W. Ry. (+), or share of surplus profits to, (—), the Government.	Total income.	Percentage of total income on total capital outlay given in column (3).	Earnings per mile per week.	Proportion of expenses to earnings.
1	2	3	4	5	6	7	8	9	10	11
	Miles.	Rs.	Rs.	Rs.			Rs.		Rs.	
1915-16	38.15	24,47,581	27,067	13,533	0·55	...	13,533	0·55	14	50·00
1916-17	38.15	27,23,628	2,13,696	1,06,848	3·92	+25,923	1,32,771	4·87	107	50·00
1917-18	38·16	27,57 388	2,25,819	1,29,590	4·70	+38,395	1,67,985	6·09	114	42·61

Southern Punjab railway (Main line) (5′ 6″ gauge)—

Chairman.—Sir Bradford Leslie, K.C.I.E.

Secretary.—E. J. Shepherd, Esq.

Offices.—Egypt House, 36, New Broad Street, London, E.C.

Date of registration of the Company.—30th July 1895.

NORTH WESTERN RAILWAY SYSTEM—*contd.*

Southern Punjab railway (Main line) (5′ 6″ gauge)—*contd.*

Progress in opening—

Sections of railway.	Date of opening.	Miles.	Total.	Grand total.	Remarks.
1	2	3	4	5	6
Main line—					
Delhi *vid* Bhatinda to Samasata	10-11-97	393·23			
Independent entrance from Delhi Brewery to Delhi.	20-12-09	0·79	400·02		
Branches—					
Narwana to Kaithal	*1-2-99	23·38	23·38		* For goods traffic. Opened for passenger traffic —8th March 1899.
Jind Junction to Jind city	7-8-16	2·52	2·52		
TOTAL . .	...	...	...	425·92	
DOUBLE LINE—					
Between Delhi Brewery Cabin Junction and Delhi Kishengunge.	1-1-12 1-7-12	0·19 1·37	1·56		

Details of construction—

Permanent-way.—The permanent-way consists of 75-lb. flat-footed steel rails laid on transverse sleepers of creosoted pine, deodar, jarrah, sal and douglas fir.

Ballast.—The line is ballasted throughout with brick stone and kunkar.

Fencing.—The line is fenced from Delhi Kishengunge to Nangloi (8·80 miles) only.

Curves.—The sharpest curve is of 1,910 feet radius.

Gradients.—The ruling gradient is 1 in 333.

Contracts (relating to all lines of the Company)—

Dated the 13th August 1895 (called the principal contract), *between the Secretary of State and the Southern Punjab Railway Company*, as to the construction, management, maintenance and working of the line from Delhi to Samasata.

Dated the 4th May 1899 (supplemental to the contract of 1895), *between the Secretary of State and the Southern Punjab Railway Company*, as to the construction, management, maintenance and working of the Narwana-Kaithal branch.

Dated the 4th June 1903 (supplemental to the contract of 1895), *between the Secretary of State and the Southern Punjab Railway Company*, as to the adoption of 1*s.* 4*d.* per rupee as the "prescribed" rate of exchange for payments made in England.

Dated the 4th October 1905 (supplemental to the contracts of 1895, 1899 and 1903), *between the Secretary of State and the Southern Punjab Railway Company*, as to the construction, management, maintenance and working of the Southern Punjab "Ludhiana" Extension.

Dated the 14th May 1908 (supplemental to the contracts of 1895, 1899, 1903 and 1905), *between the Secretary of State and the Southern Punjab Railway Company*, for the purpose of defining the position of the Ludhiana-Dhuri-Jakhal railway in relation to the Southern Punjab railway.

Dated the 24th June 1909 (supplemental to the contracts of 1895, 1899, 1903, 1905 and 1908), *between the Secretary of State and the Southern Punjab Railway Company*, as to the construction, management, maintenance and working of the Sutlej Valley railway.

Dated the 9th July 1912 (supplemental to the contracts of 1895, 1899, 1903, 1905, 1908 and 1909), *between the Secretary of State and the Southern Punjab Railway Company*, as to the construction, maintenance and working of the Jullundur-Doab railway.

Dated the 20th January 1913 (supplemental to the contract of 1912), *between the Secretary of State and the Southern Punjab Railway Company*, as to the inclusion of the Jullundur City-Nakodar branch in the Jullundur-Doab railway.

Dated the 22nd April 1914 (supplemental to the contracts of 1895, 1899, 1903, 1905, 1908, 1909, 1912 and 1913) *between the Secretary of State and the Southern Punjab Railway Company*, as to the adoption of the Government Financial year for the preparation of accounts, as to the adoption of the year ending 30th September, instead of that ending 31st December, for purposes of payment of rebate and division of surplus profits and as to the apportionment, if necessary, in respect of time, of the net earnings, in the event of the purchase of the railway by notice of purchase.

Main provisions of contracts (relating to Main line only)—

(i) *Land.*—In British territory provided by the Government free of cost to the Company. As to that in the territories of any Native State, the Government undertake to use their influence to acquire it for the Company, as far as possible, on the same terms.

(ii) *Government aid.*—The Government manage, maintain, stock and work the railway in all respects as far as practicable as part of the North Western Railway System; and allow to the Company in respect of each half-year, by way of rebate, on the net earnings of the North Western railway from traffic interchanged with the Southern Punjab railway and from all traffic, except coaching traffic, originating and terminating at stations of the North Western railway proper

NORTH WESTERN RAILWAY SYSTEM—*contd.*

Southern Punjab railway (Main line) (5′ 6″ gauge)—*concld.*

Main provisions of contracts (relating to Main line only)—*concld.*

(including the stations at Delhi and Samasata, respectively, but not including the stations of the Patiala State railway) as shall be sent over the said railway by the North Western railway in exercise of the power conferred upon, or reserved to, it by sub-clause 5 of clause 18 of the contract of 1895, such a sum (not exceeding the net earnings of the North Western railway) from the traffic above specified as together with the Company's net earnings, make up an amount equal to interest for the year at 3½ per cent per annum on the actual expenditure charged in the capital account.

(iii) *Terms of working.*—For management, maintenance, use of rolling-stock and working, the Government retain 52 per cent of the gross earnings, the remainder being the net earnings of the Company. Such net earnings, together with the rebate referred to under (ii), constitute the Company's net receipts.

(iv) *Distribution of profits.*—Surplus net receipts in excess of 3¾ per cent per annum on the total expenditure of the Company in sterling are divisible equally at the close of each year between the Government and the Company, provided that, after the sum of £5,000 has been deducted from the net receipts for administrative expenses in England and in India.

(v) *Rates and fares.*—To be fixed by the Government within the maxima and minima for the time being in force on the North Western railway.

(vi) *Special obligations as to the conveyance of.*—

(*a*) Mails, troops, police, high Government officials and Government stores.—
(*b*) Government bullion and coin, and the persons in charge thereof.—

} To be conveyed at the same rates and under the same arrangements as may be in force on State railways.

(vii) *Power of the Government to determine contract.*—Government may, by giving twelve months' previous notice of purchase, determine the contract on the 31st December 1929, or on the 31st December 1934 or on the 31st December of the last year of any subsequent period of ten years except the period expiring on 31st December 1954, by paying to the Company in sterling a sum equal to 25 times the yearly average of the Company's share of the net earnings of the railway during the five years immediately preceding the date of determination, provided that such sum shall not exceed by more than 20 per cent the total capital expenditure of the Company in sterling nor be less than such capital expenditure. Government may also determine the contract on the 31st December 1954 by paying to the Company in sterling a sum equal to the total capital expenditure in sterling. But none of the contracts for the Ludhiana extension, Sutlej Valley and Jullundur Doab railways can be determined without the principal contract being determined in like manner and *vice versa*.

(viii) *Power of the Company to surrender contract.*—Nil.

(ix) *Term of contract* [*if not determined under* (vii) *or* (viii)].—None specified.

Statistics of working—

Year.	Mileage open at end of each year.	Total capital outlay, including suspense, to end of each year, *i.e.*, outlay on (i) lines open, and (ii) lines partly or wholly under construction.	Gross earnings.	Net earnings.	Percentage of net earnings on total capital outlay given in column (3).	Rebate from N. W. Ry. (+), *or* share of surplus profits payable to the Secretary of State in England (—).	Total income.	Percentage of total income on total capital outlay given in column (3).	Earnings per mile per week.	Proportion of expenses to earnings.	Remarks.
1	2	3	4	5	6	7	8	9	10	11	12
	Miles.	Rs.	Rs.	Rs.		Rs.	Rs.		Rs.		
1897	399·80	1,99,08,812	1,61,038	77,298	0·39	+19,942	97,240	0·49	52	52·00	Adjustments under the Cripps' award were brought into account in 1901, but in these statistics they have been adjusted and allocated to the proper years.
1898	399·80	2,23,62,921	16,29,122	7,81,978	3·49	...	7,81,978	3·49	74	52·00	
1899	423·18	2,26,68,262	16,11,010	7,73,285	3·41	+17,318	7,90,603	3·48	73	52·00	
1900	423·93	2,26,57,063	16,36,280	7,89,360	3·48	+ 3,562	7,92,922	3·50	74	52·00	
1901	423·93	2,25,70,734	24,96,333	11,98,240	5·31	—2,53,275	9,44,965	4·19	113	52·00	
1902	424·72	2,27,93,660	19,41,541	9,31,940	4·09	—89,973	8,41,967	3·69	88	52·00	
1903	425·33	2,28,27,906	21,59,158	10,36,396	4·54	—1,16,614	9,19,782	4·03	98	52·00	
1904	425·33	2,29,43,454	27,47,442	13,18,772	5·74	—2,40,817	10,77,955	4·70	124	52·00	
1905	425·33	2,30,13,696	36,40,372	17,47,379	7·59	—4,54,082	12,93,297	5·62	165	52·00	
1906	425·33	2,31,30,148	41,67,059	20,00,188	8·65	—5,76,959	14,23,229	6·15	188	52·00	
1907	423·75	2,31,79,761	50,37,456	24,17,978	10·43	—7,76,243	16,41,735	7·08	228	52·00	
1908	423·75	2,33,22,671	44,44,156	21,33,194	9·14	—6,28,229	15,04,965	6·45	202	52·00	
1909	424·06	2,35,69,932	33,15,733	15,91,551	6·75	—3,56,959	12,34,592	5·24	150	52·00	
1910	424·06	2,39,18,571	43,21,320	20,74,234	8·67	—5,94,776	14,79,458	6·19	196	52·00	
1911	424·06	2,43,04,411	50,29,087	24,13,962	9·93	—7,56,864	16,57,098	6·82	228	52·00	
1912	424·06	2,47,35,330	58,22,883	28,23,784	11·41	—9,56,408	18,67,376	7·55	267	52·00	
1st qr. of 1913.	424·06	2,49,47,567	10,97,941	5,27,012	2·11	—1,47,261	3,79,751	1·52	199	52·00	
1913-14	424·06	2,56,22,112	57,93,323	27,80,795	10·85	—9,22,29	18,58,505	7·25	263	52·00	
1914-15	424·06	2,62,48,269	52,97,182	25,42,648	9·69	—7,77,584	17,65,064	6·72	240	52·00	
1915-16	424·06	2,70,79,223	63,24,292	30,34,181	11·20	—10,22,377	20,11,804	7·43	285	52·00	
1916-17	425·92	2,72,58,117	55,33,401	26,54,729	9·73	—8,46,087	18,08,642	6·63	250	52·00	
1917-18	425·92	2,73,85,003	73,26,791	35,18,639	12·85	—14,58,431	20,60,208	7·52	331	52·00	

NORTH WESTERN RAILWAY SYSTEM—*contd.*

Southern Punjab railway (Jullundur Doab Extension) (5′ 6″ gauge)—

Progress in opening—

Sections of railway.	Date of opening.	Miles.	Total.	Grand total.	Remarks.
1	2	3	4	5	6
Main line—					
Jullundur City to Kapurthala	*23-6-12	12·72			*For goods traffic. For passenger traffic—1st January 1913.
Kapurthala to Sultanpur Lodi	*26-8-12	16·56			
Sultanpur Lodi to Lohian Khas	1-1-13	4·48			
Lohian Khas to Gidarpindi	10-1-14	3·82			
Gidarpindi to Makhu	†14-4-14	8·29			†For goods traffic. For passenger traffic—1st May 1914.
Makhu to Ferozepore Cantonment	11-8-13	26·43			
			72·30		
Phillaur extension—					
Lohian Khas to Phillaur	1-6-13	38·99			
			38·99		
Jullundur City-Nakodar branch—					
Jullundur City to Nakodar.	‡30-5-14	18·90			‡For goods traffic. For passenger traffic—15th June 1914.
			18·90		
GRAND TOTAL	...	...	...	130·19	

Details of construction—

Permanent-way.—The permanent-way consists of 78-lb. double-headed rails on Bradford Leslie pattern cast iron plate sleepers, of 75-lb. flat-footed British standard rails on deodar sleepers with bearing plates at bridges, points and crossings and of 60-lb. flat-footed British standard rails on deodar sleepers on goods and minor sidings.

Ballast.—Except the length between Jullundur City and Nakodar, the line is ballasted with sand and brick.

Fencing.—The line is unfenced except round station yards and at level crossings.

Curves.—The sharpest curve is of 1,910 feet radius.

Gradients.—The steepest gradient is 1 in 300.

Contracts—

As noted under Southern Punjab railway (Main line).

Main provisions of contracts—

As noted under Southern Punjab railway (Main line) except as follows :—

(i) *Land.*—Land in British territory provided by the Government free of cost, and that in Native State (not being waste land) on payment of compensation by the Company, unless the Durbar waive their claim to such compensation.

(ii) *Government aid.*—The Government manage, maintain, stock and work the railway in all respects as far as practicable as a part of the North Western railway system and allow to the Company in respect of this line, for each year, by way of rebate, on the net earnings of the North Western railway, such a sum as together with the net earnings of the Jullundur Doab railway will be equal to interest for such year at the rate of 4½ per cent on the capital expenditure of the Company on the Jullundur Doab railway as charged to the Capital Account, provided that if in any year the rebate so ascertained shall exceed the aggregate of the following two sums :—

(*a*) net earnings of the North Western railway from its traffic interchanged with the Jullundur Doab railway and between the Jullundur Doab railway and foreign lines passing by way of the North Western railway and from traffic, except coaching traffic, originating and terminating at stations on the North Western railway proper (including the stations at Delhi, Samasata, Ferozepore, Ludhiana, Kasur, and Lodhran, Jullundur and Phillaur and including also stations on the Amritsar-Patti railway and stations on any lines joining the North Western railway at Jullundur or Phillaur from the North or the East) and sent over the Jullundur Doab railway, other than the traffic which is subject to rebate under clause 23 of the contract of 1895 or clause 12 of the contract of 1905 or clause 13 of the contract of 1909 or under all such clauses,

(*b*) such surplus of net earnings of the North Western railway in respect of traffic which is subject to rebate under clause 23 of the contract of 1895 or clause 12 of the contract of 1905 or clause 13 of the contract of 1909 or under all or any of such clauses, as shall remain after satisfying claims under such clauses or either of them (if any),

then the rebate for such year shall be reduced to an amount equal to the aggregate of the said two sums.

(iii) *Terms of working.*—For management, maintenance, use of rolling-stock and working, Government retain 52 per cent of gross earnings, the remainder being the net earnings of the Company. Such net earnings together with the rebate referred to under (ii) above constitute the Company's net receipts.

(iv) *Distribution of profits.*—Surplus net receipts in excess of 4½ per cent per annum on the total capital expenditure of the Company are divisible at the close of each year between the Company and the Government in the proportion of ¼th to the Company and ¾ths to the Secretary of State.

NORTH WESTERN RAILWAY SYSTEM—*contd.*

Southern Punjab railway (Jullundur Doab Extension) (5′ 6″ gauge)—*concld.*

Statistics of working—

Year.	Mileage open at end of each year.	Total capital outlay, including suspense, to end of each year, *i.e.*, outlay on (i) lines open, and (ii) lines partly or wholly under construction.	Gross earnings.	Net earnings.	Percentage of net earnings on total capital outlay given in column (3).	Rebate from North Western railway (+), or share of surplus profits payable to the Secretary of State in England(—).	Total income.	Percentage of total income on total capital outlay given in column (3).	Earnings per mile per week.	Proportion of expenses to earnings.
1	2	3	4	5	6	7	8	9	10	11
	Miles.	Rs.	Rs.	Rs.		Rs.	Rs.		Rs.	
1912 .	28·25	1,01,82,301	8,129	3,902	0·03	...	3,902	0·03	13	52·00
1st qr. of 1913 .	32·73	1,10,18,745	29,673	14,243	0·13	+17,649	31,892	0·29	70	52·00
1913-14 .	102·97	1,32,49,258	2,62,639	1,26,067	0·95	+1,72,394	2,98,461	2·25	60	52·00
1914-15 .	133·48	1,31,32,305	4,49,006	2,15,523	1·64	+3,52,781	5,68,304	4·33	65	52·00
1915-16 .	130·19	1,32,91,134	4,52,087	2,17,002	1·63	+3,81,506	5,98,508	4·50	66	52·00
1916-17 .	130·19	1,32 40,677	4,63,283	2,22,376	1·68	+3,72,278	5,94,654	4·49	68	52·00
1917-18.	130·19	1,32,44,224	4,18,204	2,00,738	1·51	+3,95,260	5,95,998	4·50	62	52·00

Southern Punjab railway (Ludhiana extension) (5′ 6″ gauge)—

Progress in opening—

Sections of railway.	Date of opening.	Miles.	Total.	Remarks.
1	2	3	4	5
Ludhiana to Ferozepore	*10-6-05	76·68		* For goods traffic. Opened for passenger traffic—1st October 1905.
Ferozepore to MacLeod Ganj	10-2-06	75·36		
TOTAL ...	...	...	152·04	

Details of construction—

Permanent-way.—The permanent-way consists of 75-lb. flat-footed steel rails on Australian jarrah, Douglas fir and deodar sleepers.

Ballast.—The line is ballasted with brick and stone.

Fencing.—Only station yards, and short lengths on either side of all level crossings where gates and gate lodges have been provided, are fenced.

Curves.—The sharpest curve is of 1,910 feet radius.

Gradients.—The ruling gradient is 1 in 400.

Contracts—

As noted under Southern Punjab railway (Main line).

Main provisions of contracts—

As noted under Southern Punjab railway (Main line) except as follows :—

(i) *Government aid.*—The Government allow to the Company, in respect of each half-year, a rebate on the net earnings of the North Western railway derived from—

(*a*) the traffic interchanged between the North Western railway and this railway, whether directly or by way of the other railways of the Company ;

(*b*) all traffic, except coaching traffic, originating and terminating at stations of the North Western railway proper (including the stations at Delhi, Samasata, Ferozepore and Ludhiana, respectively) which shall be sent over this railway by the North Western railway in exercise of the power conferred upon, or reserved to, it by sub-clause 5 of clause 18 of the contract of 1895 ; and

(*c*) coaching traffic between Ludhiana and Ferozepore over and above the average earnings of the North Western railway from such traffic during the corresponding half-year in the five years preceding the opening of this line.

Such rebate to be of an amount which shall not exceed the amount of the said net earnings, and which, when added to all allowances by way of rebate made to the Company under the provisions of the contracts of 1895 and 1899 in respect of the same half-year, shall not exceed the net earnings of the North Western railway from all traffic interchanged with or sent over any part of the Company's lines (including this line), but which, subject as aforesaid, shall extend to an amount sufficient, with the net earnings of this line, to make up interest at the rate of 5 per cent per annum on the capital expenditure of the Company in respect of this line as charged in the capital account.

NORTH WESTERN RAILWAY SYSTEM—*contd.*

Southern Punjab railway (Ludhiana Extension) (5′ 6″ gauge)—*concld.*

Main provisions of contracts—*concld.*

Provided that the Company shall not in any half-year be entitled, under clause 12 of the contract of 1905, to any rebate in respect of traffic which is also the subject of rebate under clause 23 of the contract of 1895 and if to the extent to which in that half-year the sum required to make up the earnings of the Company to 3½ per cent under clause 23 of the contract of 1895 would have been insufficient for that purpose without taking into account such traffic or some part thereof, but any surplus of net earnings of the North Western railway in respect of traffic which is subject to rebate both under the first part of clause 12 of the contract of 1905, and also under the contract of 1895 which shall remain after satisfying any claim under the contract of 1895, shall nevertheless be applicable to meet any claim of the Company to rebate under clause 12 of the contract of 1905.

(ii) *Distribution of profits.*—Surplus net receipts in excess of 5 per cent per annum on the Company's total capital expenditure in respect of the extension are divisible at the close of each year in the proportion of ¼th to the Company and ¾ths to the Government.

Statistics of working—

Year.	Mileage open at end of each year.	Total capital outlay, including suspense, to end of each year, *i.e.*, outlay on (i) lines open, and (ii) lines partly or wholly under construction.	Gross earnings.	Net earnings.	Percentage of net earnings on total capital outlay given in column (3).	Rebate from North Western railway (+), *or* share of surplus profits payable to the Secretary of State in England(−).	Total income.	Percentage of total income on total capital outlay given in column (3).	Earnings per mile per week.	Proportion of expenses to earnings.
1	2	3	4	5	6	7	8	9	10	11
	Miles.	Rs.	Rs.	Rs.		Rs.	Rs.		Rs.	
1905 .	77·05	70,09,669	73,332	35,200	0·50	+10,500	45,700	0·65	33	52·00
1906 .	155·05	79,33,781	6,29,557	3,02,187	3·81	+56,692	3,58,879	4·52	78	52·00
1907 .	152·04	83,43,814	8,98,142	4,31,108	5·17	−15,147	4,15,961	4·99	113	52·00
1908 .	152·04	87,92,087	8,31,931	3,99,327	4·54	+29,270	4,28,597	4·87	105	52·00
1909 .	152·04	89,06,132	7,88,692	3,78,573	4·25	+65,713	4,44,286	4·98	100	52·00
1910 .	152·04	89,40,892	10,03,716	4,81,784	5·39	−24,458	4,57,326	5·11	127	52·00
1911 .	152·04	89,83,708	10,90,618	5,23,497	5·82	−56,014	4,67,483	5·20	138	52·00
1912 .	152·04	90,15,837	11,77,568	5,65,233	6·26	−84,060	4,81,173	5·34	149	52·00
1st qr. of 1913 .	152·04	90,16,169	2,88,228	1,38,349	1·53	−19,327	1,19,022	1·32	146	52·00
1913-14 .	152·04	91,86,178	13,47,598	6,46,847	7·04	−1,41,400	5,05,447	5·50	170	52·00
1914-15 .	152·04	92,45,584	12,04,864	5,78,334	6·25	−87,210	4,91,124	5·31	152	52·00
1915-16 .	152·04	92,71,455	12,50,601	6,00,289	6·47	−1,02,821	4,97,468	5·37	157	52·00
1916-17 .	152·04	92,90,490	13,06,790	6,27,260	6·75	−1,21,828	5,05,432	5·44	165	52·00
1917-18 .	152·04	93,29,624	12,80,758	6,14,763	6·59	−1,70,099	4,44,664	4·76	162	52·00

Southern Punjab railway (Sutlej Valley Extension) (5′ 6″ gauge)—

This line, from Kasur to Lodhran, which was opened on the 6th July 1910, was closed and dismantled during the year 1917-18, its materials being required by Government in connection with the prosecution of the war.

Contracts—

As noted under Southern Punjab railway (Main line).

Main provisions of contracts—

As noted under Southern Punjab railway, (Main line), except as follows :—

(i) *Government aid.*—The Government allow to the Southern Punjab Railway Company, for each half-year, by way of rebate, on the net earnings of the North Western railway, such a sum (not exceeding the amount of such net earnings of the North Western railway) as, together with the net earnings of the Company in respect of this railway, will be equal to interest at 4½ per cent per annum on the Company's total capital expenditure on the Sutlej Valley railway, provided that if in any year the rebate so ascertained shall exceed the aggregate of—

(*a*) the net earnings of the North Western railway from its traffic interchanged with the Sutlej Valley railway and from traffic, except coaching traffic, originating and terminating at stations on the North Western railway proper (including the stations at Delhi, Samasata, Ferozepore, Ludhiana, Kasur and Lodhran), and sent over the Sutlej Valley railway, other than the traffic which is subject to rebate under clause 23 of the contract of 1895 or clause 12 of the contract of 1905 or under both these clauses, and

(*b*) such surplus (if any) of net earnings of the North Western railway in respect of traffic which is subject to rebate under clause 23 of the contract of 1895 or clause 12 of the contract of 1905 or under both these clauses, as shall remain after satisfying claims under such clauses or either of them (if any),

then the rebate for such year shall be reduced to an amount equal to the aggregate of the said two sums.

(ii) *Distribution of profits.*—Surplus net receipts in excess of 4½ per cent per annum on the Company's total capital expenditure on the Sutlej Valley railway are divisible at the close of each year in the proportion of ¼th to the Company and ¾ths to the Government.

NORTH WESTERN RAILWAY SYSTEM—*contd.*

Southern Punjab railway (Sutlej Valley Extension), (5′ 6″ gauge)—*concld.*

Statistics of working—

Year.	Mileage open at end of each year.	Total capital outlay, including suspense, to end of each year, *i.e.*, outlay on (*i*) lines open, and (*ii*) lines partly or wholly under construction.	Gross earnings.	Net earnings.	Percentage of net earnings on total capital outlay given in column (3).	Rebate from North Western railway (+), *or* share of surplus profits payable to the Secretary of State in England (—).	Total income.	Percentage of total income on total capital outlay given in column (3).	Earnings per mile per week.	Proportion of expenses to earnings.
1	2	3	4	5	6	7	8	9	10	11
	Miles.	Rs.	Rs.	Rs.		Rs.	Rs.		Rs.	
1910 .	209·46	*1,54,94,559	2,89,668	1,39,041	0·90	+1,85,209	3,24,250	2·14	54	52·00
1911 .	208·19	1,52,17,748	5,66,486	2,71,914	1·79	+4,03,911	6,75,825	4·44	52	52·00
1912 .	208·19	1,52,28,474	5,17,652	2,48,473	1·63	+4,39,385	6,87,858	4·52	48	52·00
1st qr. of 1913 .	208·19	1,52,33,176	1,30,630	62,702	0·41	+1,08,963	1,71,665	1·13	48	52·00
1913-14 .	208·19	1,52,73,939	6,77,949	3,25,415	2·13	+3,60,743	6,86,158	4·49	63	52·00
1914-15 .	208·19	1,52,98,482	6,00,181	2,88,087	1·88	+3,99,533	6,87,620	4·49	55	52·00
1915-16 .	208·19	1,52,63,858	6,40,764	3,07,566	2·01	+3,78,208	6,85,774	4·49	59	52·00
1916-17 .	208·19	1,52,88,153	5,76,876	2,76,901	1·81	+4,10,268	6,87,169	4·49	53	52·00
1917-18 .	...	1,53,12,352	3,16,818	1,52,073	0·99	†+5,36,587	6,88,660	4·50	49	52·00

* Includes Rs. 3,24,250 adjusted in 1911. † Including Rs. 1,50,000 received from the Military Department as compensation for loss of revenue.

Jacobabad-Kashmor railway (2′ 6″ gauge)—

Date of registration of the Company.—30th April 1913.

The construction of this line by the Upper Sind Light Railways, Jacobabad-Kashmor Feeder Company Limited. was sanctioned under Railway Board's Notification No. 282, dated the 16th October 1913.

Progress in opening—

Section of railway.	Date of opening.	Miles.	Total.
1	2	3	4
Jacobabad to Kashmor	1-12-14	76·70	76·70

Details of construction—

Permanent-way.—The permanent-way consists of 30-lb. flat-footed British standard steel rails on sal sleepers.

Ballast.—The line is not ballasted.

Fencing.—The line is unfenced, except round Jacobabad station yard.

Curves.—The sharpest curve is of 573 feet radius.

Gradients.—The ruling gradient is 1 in 400.

Contract.—

Dated the 29th July 1916, *between the Secretary of State and the Upper Sind Light Railways, Jacobabad-Kashmor Feeder Company, Limited,* as to the construction, maintenance, management and working of the Jacobabad-Kashmor railway.

Railway Board's letter No. 225-2547-P., dated the 5th August 1915, sanctioning the raising of an additional capital of Rs. 2 lakhs for the completion of the Jocobabad-Kashmor railway.

Main provisions of contract

(i) *Land.*—Land in British territory provided by Government free of cost.

(ii) *Government aid.*—By way of rebate the Government allow to the Company, in respect of each year, such a sum, not exceeding the net earnings of North Western railway derived from all traffic (except stores) interchanged between the North Western railway and the said railway as shall, together with the net earnings of the Company, be equal to the interest for the year at a rate of 5 per cent per annum on the actual expenditure charged in the Capital Account. Government also allow Rs. 7,500 on account of office expenses and expenses of management and direction of the Company, as also all such legal expenses as are properly incurred by the Company and approved by the Secretary of State or the Government of India, and as are under the provisions of the contract debitable to Revenue.

(iii) *Terms of working.*— } For management, maintenance, and working Government retain 45 per cent of the gross earnings of the said railway, the remainder constituting the net earnings is paid to the Company. But should the net earnings of the Company in any year exceed the minimum amount sufficient to pay a dividend of 5 per cent per annum, such excess is to be applied towards the payment of office expenses and expenses of management and direction of the Company for the year up to a limit of Rs. 7,500, the balance, if any, being divided equally between Government and the Company. Provided that if the surplus profits are insufficient to meet the administration charges, the difference will be paid to the Company by the working agency out of the stipulated amount retained by the latter as working expenses.

(iv) *Distribution of profits.*— }

(v) *Rates and fares.*—To be sanctioned by the Secretary of State within the minimum and maximum in force on, and the classification of goods to be in conformity with that of, the North Western railway.

NORTH WESTERN RAILWAY SYSTEM—*contd.*

Jacobabad-Kashmor railway (2′ 6″ gauge)—*contd.*

Main provision of Contract—*contd.*

(vi) *Special obligations as to the conveyance of.*—

(*a*) Mails, troops, police, high Government officials and Government stores.—

(*b*) Government bullion and coin, and the persons in charge thereof.—

} To be carried in all respects as far as practicable in the same manner and subject to the same regulations and control by the Secretary of State as the same are carried on the North Western railway.

(vii) *Power of the Government to determine contract.*—The Government may, by giving 12 months' previous notice of purchase, in writing, determine the contract either on the 31st March 1945 or on the 31st March in the last year of any subsequent period of 10 years by paying to the Company in rupees, 25 times the average of the yearly net earnings (excluding payments on account of rebate) during the 3 years immediately preceding the date of determination subject to a limit of 20 per cent in excess of, but not less than, the total capital expenditure of the Company.

The Government may also, by giving 12 months' previous notice of "special purchase," determine the contract at any time in the following cases :—

(*a*) When it is considered desirable to alter the gauge of the railway.

(*b*) When it is considered desirable to convert the railway into a line of through communication.

(*c*) When the Secretary of State desires to extend the said railway (without altering the gauge or making the line part of a through route) and the Company is unable or unwilling to supply the necessary capital for such extension.

If the contract shall be determined by notice of "special purchase," the Government will pay to the Company in rupees 25 times the average of the yearly net earnings (excluding payments on account of rebate) during the 3 years preceding the date of determination or 115 per cent of the total capital expenditure, whichever may be the greater.

(viii) *Power of the Company to surrender contract.*—Nil.

(ix) *Term of contract.*—From 29th July 1916 to 31st March 1945 and thereafter as noted under (*vii*).

Statistics of working—

Year.	Mileage open at end of each year.	Total capital outlay, including suspense, to end of each year, *i.e.*, outlay on (*i*) lines open, and (*ii*) lines partly or wholly under construction.	Gross earnings.	Net earnings.	Percentage of net earnings on total capital outlay given in column (3).	Rebate and Administrative charges from North Western railway (+), or share of surplus profits payable to the Secretary of State in England (—).	Total income.	Percentage of total income on total capital outlay given in column (3.)	Earnings per mile per week.	Proportion of expenses to earnings.
1	2	3	4	5	6	7	8	9	10	11
	Miles.	Rs.	Rs.	Rs.		Rs.	Rs.		Rs.	
1914-15 .	76·70	20,99,487	21,420	11,781	0·56	...	11,781	0·56	16	45·00
1915-16 .	76·70	22,21,742	1,36,347	74,991	3·38	+26,442	1,01,433	4·56	34	45·00
1916-17 .	76·70	22,57,892	1,49 121	67,104	2·97	+30,127	97,261	4·30	37	45·00
1917-18 .	76·70	21,84,818	1,34,280	73,854	3·38	+60,373	1,34,227	6 14	34	45·00

Kalka-Simla railway (2′ 6″ gauge)—

The railway was constructed by, and at the cost of, the Delhi-Umballa-Kalka Railway Company. On the representation of the Company it was decided to purchase the Company's interest in the line. This was effected by the payment of £300,000 ; the Secretary of State waiving all claims to arrears of unpaid interest on the advances, *viz.*, Rs. 1,16,47,512, made to the Company. The purchase of the line by the State was effected from 1st January 1906 ; but the Company continued to work it under the direct orders of the Railway Board up to the 31st December 1906. It was made over to the North Western railway administration with effect from the 1st January 1907.

Progress in opening—

Sections of railway.	Date of opening.	Miles.	Total.
1	2	3	4
Kalka to Simla station	9-11-03	59·44	
Simla station to Old Bullock Train Office	27-6-09	0·48	
TOTAL ...	...	...	59·92

Details of construction—

Permanent-way.—The permanent-way consists of 62, 60 and 41¼-lb. flat-footed steel rails on wooden sleepers. The 41¼-lb. rails are being renewed with 60-lb. and 62-lb. flat-footed rails.

Ballast.—The line is ballasted with stone.

Fencing.—The line is fenced only along the Kalka camping ground and through the outskirts of the town of Kalka.

Curves.—Most of the curves are compound, the limiting radius being 120 feet.

Gradients.—The ruling gradient is 1 in 33.

NORTH WESTERN RAILWAY SYSTEM—*contd.*

Kalka-Simla railway (2′ 6″ gauge)—*concld.*

Contract—

Nil.—The line is owned and worked by the State.

Rates and fares.—May be varied within the limits of certain fixed maxima and minima subject to certain special conditions regarding charges for tunnels.

Statistics of working (Those for the periods prior to 1908 will be found in Appendix 38 to the Railway Administration Report for 1907).—

Year.	Mileage open at end of each year.	Total capital outlay, including suspense, to end of each year *i.e.*, outlay on (*i*) lines open, and (*ii*) lines partly or wholly under construction.	Gross earnings.	Net earnings.	Percentage of net earnings on total capital outlay given in column (3).	Interest.	Gain or loss to the State *pertaining to each year.*	Earnings per mile per week.	Proportion of expenses to earnings.	Remarks.
1	2	3	4	5	6	7	8	9	10	11
	Miles.	Rs.	Rs.	Rs.		Rs.	Rs.	Rs.		
1908 . .	59·44	1,83,44,085	9,64,623	2,90,131	1·58	5,67,129	—2,76,998	312	69·92	The decrease in net earnings in 1910 is mainly due to renewals of permanent-way with 60-lb. rails and charged for special renewals amounting to Rs. 2,04,056.
1909 .	59·92	1,88,14,812	9,81,289	2,39,679	1·27	5,81,632	—3,41,953	316	75·58	
1910 .	59·92	1,96,24,591	10,30,967	36,042	0·18	6,03,907	—5,67,865	331	96·50	
1911 .	59·92	1,96,91,570	11,54,432	3,37,867	1·71	6,22,427	—2,84,560	370	70·73	
1912 .	59·92	1,97,61,852	12,59,823	3,95,164	2·00	6,25,180	—2,30,016	404	68·63	
1st qr. of 1913 .	59·92	1,98,48,191	2,61,535	41,353	0·21	1,56,961	—1,15,608	336	84·19	
1913-14 .	59·92	1,99,24,926	13,34,402	4,48,750	2·25	6,28,187	—1,79,437	428	66·37	
1914-15 .	59 92	1,97,43,601	12,82,261	7,41,912	3·76	6,42,417	+99,495	412	42·14	
1915-16 .	59·92	1,97,94,816	13,47,605	7,27,659	3·67	6,39,799	+87,860	433	46·00	
1916-17 .	59·92	1,97,56,575	15,53,676	7,42,212	3·76	6,07,566	+1,34,646	498	52·23	
1917-18 .	59·92	1,97,88,117	16,12,934	8,23,957	4·16	6,40,000	+1,83,957	518	48·92	

Kohat-Thal railway (2′ 6″ gauge)—

Originally the line was on the 2′ 6″ gauge from Khushalgarh, from which place to Kohat it was converted into 5′ 6″ gauge and merged in the North Western railway proper in 1908.

Progress in opening—

Section of railway.	Date of opening.	Miles.	Total.
1	2	3	4
Kohat to Thal	1-4-03	61·75	61·75

Details of construction—

Permanent-way.—The line is laid partly with 41¼-lb. and partly with 35-lb. rails, on wooden sleepers.

Ballast.—The line is ballasted throughout with broken stone.

Fencing.—The line is unfenced.

Curves.—The sharpest curve is of 239 feet radius.

Gradients.—The ruling gradient is 1 in 100.

Contract—

Nil.—The line is owned and worked by the State.

Statistics of working (Those for the periods prior to 1908 will be found in Appendix 38 to the Railway Administration Report for 1907).—

Year.	Mileage open at end of each year.	Total capital outlay, including suspense, to end of each year *i.e.*, outlay on (*i*) lines open, and (*ii*) lines partly or wholly under construction.	Gross earnings.	Net earnings.	Percentage of net earnings on total capital outlay given in column (3).	Earnings per mile per week.	Proportion of expenses to earnings.
1	2	3	4	5	6	7	8
	Miles.	Rs.	Rs.	Rs.		Rs.	
1908 . .	61·75	42,64,510	1,06,963	—3,50,398	...	33	427·59
1909 . .	61·75	42,68,969	1,04,952	—2,34,978	...	33	323·89
1910 . .	61·75	42,77,931	1,03,605	—1,36,816	...	32	231·57
1911 . .	61·75	43,16,826	1,14,485	—1,67,880	...	36	246·64
1912 . .	61·75	43,99,955	1,22,442	—1,61,586	...	38	231·97
1st qr. of 1913 .	61·75	44,02,760	30,847	—13,648	...	38	144·24
1913-14 .	61·75	43,70,614	1,38,223	—6,799	...	43	104 92
1914-15 .	61·75	43,90,461	1,40,484	—58,750	...	44	141·82
1915-16 .	61 75	44,14,291	1,84,518	—29,241	...	57	115·85
1916-17 .	61·75	42,59,494	1,76,097	7,010	0·16	55	96·02
1917-18 .	61·75	42,79,892	1,82,671	—18,144	...	57	109·93

NORTH WESTERN RAILWAY SYSTEM—*contd.*

Nowshera-Durgai railway (2′ 6″ gauge)—

Progress in opening—

Section of railway.	Date of opening.	Miles.	Total.
1	2	3	4
Nowshera to Durgai	1-1-01	40·40	40·40

Details of construction—

Permanent-way.—The permanent-way consists of 35-lb. flat-footed steel rails laid partly on wooden and partly on steel sleepers.

Ballast.—The line is ballasted throughout with broken stone.

Fencing.—The line is unfenced.

Curves.—The sharpest curve has a radius of 250 feet.

Gradients.—The ruling gradient is 1 in 100.

Contract—

Nil.—The line is owned and worked by the State.

Statistics of working (Those for the periods prior to 1908 will be found in Appendix 38 to the Railway Administration Report for 1907).—

Year.	Mileage open at end of each year.	Total capital outlay, including suspense, to end of each year, *i.e.*, outlay on (*i*) lines open and (*ii*) lines partly or wholly under construction.	Gross earnings.	Net earnings.	Percentage of net earnings on total capital outlay given in column (3).	Earnings per mile per week.	Proportion of expenses to earnings.
1	2	3	4	5	6	7	8
	Miles.	Rs.	Rs.	Rs.		Rs.	
1908 . .	40·25	25,99,122	1,98,567	28,729	1·10	95	85·53
1909 . .	40·25	25,92,909	2,04,475	5,747	0·23	98	97·19
1910 . .	40·25	25,93,397	2,25,044	29,291	1·12	107	86·98
1911 . .	40·25	26,01,859	2,29,148	37,536	1·44	109	83·62
1912 . .	40·25	26,16,081	2,43,404	34,514	1·34	116	85·82
1st qr. of 1913	40·25	26,24,124	58,354	5,024	0·17	111	91·39
1913-14 .	40·25	26,30,567	2,64,088	75,928	2·88	126	71·25
1914-15 .	40·25	26,59,785	2,63,500	90,773	3·41	126	65·55
1915-16 .	40·25	26,59,334	3,27,166	1,02,400	3·85	156	68·70
1916-17 .	40·40	26,68,370	2,93,801	97,074	3·64	141	66·96
1917-18 .	40·40	26,76,256	2,89,402	1,11,166	4·15	138	61·59

Trans-Indus (Kalabagh-Bannu) railway (2′ 6″ gauge)—

Progress in opening—

Section of railway.	Date of opening.	Miles.	Total.	Grand total.
1	2	3	4	5
Main Line—				
Kalabagh to Bannu	15-6-13	88·91	88·91	
Tank Extension—				
Laki *via* Pezu to Tank	1-5-16	46·47	46·47	
GRAND TOTAL .	...	...	...	135·38

NORTH WESTERN RAILWAY SYSTEM—*concld.*

Trans-Indus (Kalabagh-Bannu) railway (2′ 6″ gauge)—*concld.*

Details of construction—

Permanent-way.—The permanent-way consists of flat-footed British standard section, steel rails, 50 lbs. to the yard on the main line and on the ghat section of the Laki-Pezu line, and 40 lbs. to the yard on the remainder, on deodar sleepers.

Ballast.—The main line is partly unballasted and the remainder is ballasted with sand and stone. The ghat section of the Laki-Pezu line is ballasted with shingle and the remainder with sand. The line between Pezu and Tank is ballasted with sand, except at dips and bridge approaches where stone is used.

Fencing.—The line is unfenced, except in Tank station yard and the side of the line next to the public road-way, between Gambila and Bannu.

Curves.—The sharpest curve, which is on the Laki-Pezu section, has a radius of 404·5 feet.

Gradients.—The ruling gradient is 1 in 100 between Kalabagh and Bannu and 1 in 45 between Luki and Tank.

Contract—

Nil.—The line is owned and worked by the State.

Statistics of working—

Year.	Mileage open at end of each year.	Total capital outlay, including suspense, to end of each year, *i.e.*, outlay on (*i*) lines open and (*ii*) lines partly or wholly under construction.	Gross earnings.	Net earnings.	Percentage of net earnings on total capital outlay given in column (3).	Earnings per mile per week.	Proportion of expenses to earnings.
1	2	3	4	5	6	7	8
	Miles.	Rs.	Rs.	Rs.		Rs.	
1913-14 .	88·91	68,27,036	2,18,035	46,490	0·68	59	78·68
1914-15 .	88·91	81,82,561	3,45,918	—16,416	...	75	104·75
1915-16 .	88·91	92,27,536	3,61,243	—34,678	...	78	109·60
1916-17 .	135·39	97,62,951	4,21,571	19,450	0·20	61	95·39
1917-18 .	135·38	1,07,54,744	6,63,082	—75,533	...	94	111·39

Larkhana-Jacobabad railway (5′ 6″ gauge)—

Date of registration of the Company.—1913.

The construction of this line by the Sind Light Railway Company was sanctioned under Railway Board's Notification No. 452-P., dated the 9th March 1916.

Progress in opening—

Section of railway.	Date of opening.	Miles.	Total.
1	2	3	4
Larkhana to Jacobabad (sanctioned on 9th March 1916)	...	75·45	75·45

OUDH AND ROHILKHAND RAILWAY SYSTEM.

Lines comprised in the system.—The Oudh and Rohilkhand railway system is made up of—

	Miles.
(*a*) Oudh and Rohilkhand railway { (5′ 6″ gauge) 1,509·77 / (3′ 3⅜″ gauge) 2·18 }	1,511·95
(*b*) Hardwar-Dehra railway (5′ 6″ gauge)	32·04
(*c*) Cawnpore-Burhwal link (3′ 3⅜″ gauge)	80·34
Total	1,624·33

Running powers—

Home line over Foreign lines :—

		Miles.
Ghaziabad to Delhi, East Indian railway, granted for passenger and goods trains but exercised for the former only.		13·00
Meerut City to Meerut Cantonment, North Western railway, for passenger trains only		2·75
	Total	15·75

Foreign lines over Home line :—

		Miles.
Great Indian Peninsula railway at Cawnpore, for passenger and goods trains		0·86
" " " " Cawnpore to Lucknow, for passenger trains only		44·63
East Indian railway, Moghal Sarai to Benares Cantonment, for certain passenger trains only		10·00
		55·49
Bengal and North-Western railway, Cawnpore to Aishbagh, 45·03 miles, and Daliganj to Burhwal, 35·31 miles (Cawnpore-Burhwal link, 3′ 3⅜″ gauge).		80·34
" " " " Benares Cantonment to Benares City	for passenger and goods trains.	2·18
Rohilkund and Kumaon railway, over Ramganga bridge between Bareilly and Basharatganj.		0·52
" " " " " Dalpatpur and Moradabad		0·49
		83·44

Oudh and Rohilkhand railway (5′ 6″ gauge)—

The Oudh and Rohilkhand railway was acquired by the State from the late Guaranteed Company on the 1st January 1889.

A tramway constructed at the expense of Messrs. Carew and Company connects the Rosa Sugar factory with Rosa station on the Oudh and Rohilkhand railway. This tramway is 3·25 miles long and is worked by cattle power. It is used for goods traffic only.

Date of registration of the late guaranteed Company.—August 1867.

Progress in opening—

Sections of railway.	Date of opening.	Miles.	Total.	Grand total.	Remarks.
1	2	3	4	5	6
Main line—					
Moghal Sarai to mile 3·98	22-12-62	3·98			
Mile 3·98, south of the Dufferin bridge, to Kashi (Benares Ganges) station.	1-10-87	4·25			
Kashi (Benares Ganges) station to Benares Cantonment.	18-6-88	1·50			
Benares Cantonment to Rae Bareli	4-4-93	138·78			
Rae Bareli to Lucknow	15-10-93	48·68			
Lucknow to Sandila	1-2-72	30·24			
Sandila to Hardoi	15-7-72	33·00			
Hardoi to Shahjahanpur	1-3-73	39·00			
Shahjahanpur to Pitambarpur	8-9-73	32·00			
Pitambarpur to Bareilly	1-11-73	13·00			
Bareilly to Moradabad (chord line *viâ* Rampur).	8-6-94	*26·07			* Of this, 0·49 mile over the Ramganga bridge (Moradabad) is of mixed (5′ 6″ and 3′ 3⅜″) gauge.
Moradabad to Nagina	8-10-84	47·25			
Nagina to Najibabad	1-4-85	18·70			
Najibabad to Saharanpur	1-1-86	58·25			
			519·70		
Benares-Lucknow loop—					
Benares Cantonment to Shahganj	5-1-74	56·03			
Shahganj to Bilwai	1-5-74	7·00			
Bilwai to Malipur	18-4-74	9·00			
Malipur to Akbarpur	2-3-74	12·00			
Akbarpur to Fyzabad	10-6-73	38·24			
Fyzabad to Bara Banki	25-11-72	61·97			
Bara Banki to Lucknow Block hut	1-4-72	14·43			
			198·67		
Bareilly-Moradabad loop—					
Bareilly to mile 5	22-12-73	†5·00			† Of this, 1·17 miles over Ramganga bridge (Bareilly) are of mixed 5′ 6″ and 3′ 3⅜″) gauge.
Mile 5 to Aonla	1-11-73	11·00			
Aonla to Chandausi	10-6-73	27·00			
Chandausi to Moradabad	28-10-72	27·50			
			70·50		
Carried over	...	...	...	788·87	

OUDH AND ROHILKHAND RAILWAY SYSTEM—*contd.*

Oudh and Rohilkhand railway (5′ 6″ gauge)—*contd.*

Progress in opening—*concld.*

Sections of railway.	Date of opening.	Miles.	Total.	Grand total.	Remarks.
1	2	3	4	5	6
Brought forward	...	...	...	788·87	
Branches on the main line—					
Cawnpore branch—					
Lucknow to Cawnpore	23-4-67	42·00			
Left bank of the Ganges to junction with the East Indian railway at Cawnpore	15-7-75	3·22			
Balamau-Madhoganj branch—			45·22		
Balamau to Madhoganj	20-12-03	14·20			
Madhoganj-Auhadpur extension—			14·20		
Madhoganj to Bilgram	15-11-09	7·62			
Bilgram to Auhadpur	9-3-10	9·43			
Balamau-Sitapur branch—			17·05		
Balamau to Misrikh	9-3-10	22·44			
Misrikh to Sitapur	5-4-10	14·32			
Rosa-Sitapur branch—			36·76		
Rosa to Sitapur City	18-6-10	49·22			
Sitapur City to Sitapur Cantonment	2-2-11 6-4-14	2·66 0·77			
Moradabad-Ghaziabad branch—			52·65		
Moradabad to Gajroula	1-4-00	33·40			
Gajroula to Ghaziabad	25-11-00	53·37			
Hapur-Meerut branch—			86·77		
Hapur to Meerut	7-11-04	18·09			
Kotdwara branch—			18·09		
Najibabad Junction to the right bank of the Koh river opposite Kotdwara	24-12-96	15·19			
Hardwar branch—			15·19		
Lhaksar Junction to the left bank of the Ganges Canal near Jawalapur	1-1-86	13·53			
Left bank of the Ganges Canal near Jawalapur to Hardwar	20-3-86	3·53			
Branches on Benares-Lucknow loop—			17·06		
Allahabad-Fyzabad branch—					
Fyzabad to Sultanpur	1-2-04	35·50			
Sultanpur to Siwait*	1-7-03	*47·05			*Excluding 2·45 miles, between Partabgarh and Chilbila, which is a part of the main line.
Siwait to Phaphamau	20-1-04	3·27			
Phaphamau to Allahabad	1-1-05	7·00			
Allahabad-Jaunpur branch—			92·82		
Phaphamau to Mariahu	18-6-06	47·51			
Mariahu to Zafarabad	1-1-07	10·67			
Bahramghat branch—			58·18		
Bara Banki to Bahramghat	20-11-72	†21·52			
			21·52		† Of this the length from Burhwal to Bara Banki, 16·79 miles, is of mixed (5′ 6″ and 3′ 3½″) gauge.
ıches on the Bareilly-Moradabad loop—					
Aligarh branch—					
Chandausi to Rajghat Narora	28-10-72	30·48			
Rajghat Narora to Aligarh	1-2-72	30·12			
Allahabad-Rae Bareli-Cawnpore branch—			60·60		
Phaphamau to Rae Bareli	2-11-11	67·60			
Daryapur to Dalmau	2-11-11	15·15			
Unchahar to Unao	1-2-12	69·44			
Gajroula-Chandpur Siau branch—			152·19		
Gajroula to Chandpur Siau	7-6-11	21·88			
			21·88		
Akbarpur-Tanda Branch—					
Akbarpur to Tanda	28-10-12	10·72	10·72	720·90	
Total 5′ 6″ gauge ...	...	...	...	1,509·77	
″ *gauge—Benares City branch—*					
Benares Cantonment (Oudh and Rohilkhand) to Benares City (Bengal and North-Western)	1-4-99	2·18	2·18	2·18	
TOTAL OPEN MILE GE	...	...	...	1,511·95	
JBLE LINE—					
Lucknow Blockhut to Kakori	11-10-09	11·62			
Moghal Sarai to Bechupur	21-4-13	1·24			
Bechupur to right bank of Dufferin Bridge	21-12-12	4·19			
Kashi to Benares Cantonment	5-3-13	2·82			
Saharanpur to Khan Alampura	11-5-14	1·35			
			21·22		

OUDH AND ROHILKHAND RAILWAY SYSTEM—*contd.*

Oudh and Rohilkhand railway (5′ 6″ gauge)—*concld.*

Details of construction—

Permanent-way.—The main line, which was laid with 75-lb. flat-footed steel rails on cast-iron pot sleepers, is being relaid with 90-lb. flat-footed steel rails, British Standard, on wooden sleepers and about 326 miles, including double line, are practically complete. The pot sleepers in the main line have all been replaced by wooden sleepers. The Benares-Lucknow loop is laid with 75-lb. flat-footed steel rails on cast-iron pot sleepers, of which 63 miles have been replaced by wooden sleepers and 23 miles with 90-lb. flat-footed steel rails. On most of the branches the rails are 75-lb. flat-footed steel. The Bahramghat and Balamau-Madhoganj branches are laid partly with 75-lb. flat-footed steel rails, and partly with 60-lb. iron and steel rails, and the Madhoganj-Auhadpur extension with 60-lb. flat-footed steel rails.

The Allahabad-Rae Bareli-Cawnpore branch is laid with 90-lb. flat-footed steel rails, British Standard, on wooden sleepers.

The sleepers are of the following types:—Stamped steel bowls, cast-iron pots (Fowler's patent box, Walton's, Hederstedts and M.C.), steel trough and wood (sâl, deodar and Australian hard wood). There are a few wrought-iron saddle back sleepers still in the Kotdwara and Bahramghat branches.

Ballast.—The main line and branches are ballasted with sand, kunkur, stone, shingle and broken brick.

Fencing.—The line is fenced throughout with the exception of the Balamau-Auhadpur, Rosa-Sitapur, Gajroula-Chandpur, Hapur-Meerut, Rajaka Sahaspur-Sambhal and Kotdwara branches and a portion of the Allahabad-Jaunpur branch.

Curves.—The sharpest curve on the line is of 955 feet radius.

Gradients.—The ruling gradient of the railway is 1 in 400, except between Rajaka Sahaspur and Sambhal 1 in 333, between Benares and Moghal Sarai, 1 in 300; between Moradabad and Lhaksar, 1 in 200; between Lhaksar and Saharanpur, 1 in 150; and between Najibabad and right bank of the Koh river, 1 in 100

Contracts—

Nil.—The railway is owned and worked by the State.

Rates and fares.—Certain maxima and minima have been fixed by the Government, between the limits of which the Railway Administration can vary the rates and fares quoted for goods and coaching traffic.

Statistics of working (Those for the periods prior to 1889 will be found in Appendix 38 to the Railway Administration Report for 1907).—

Includes the Cawnpore-Burhwal (3′ 3⅜″ gauge) Link.

Year.	Mileage open at end of each year.	Total capital outlay, including suspense, to end of each year, *i.e.*, outlay on (*i*) lines open, and (*ii*) lines partly or wholly under construction.	Gross earnings.	Net earnings.	Percentage of net earnings on total capital outlay given in column (3).	Interest.	Gain or loss to the State *pertaining to each year.*	Earnings per mile per week.	Proportion of expenses to earnings.
1	2	3	4	5	6	7	8	9	10
	Miles.	Rs.	Rs.	Rs.		Rs.	Rs.	Rs.	
1889	692·55	9,22,32,226	75,39,683	42,04,076	4·56	49,71,898	—7,67,822	209	44·24
1890	692·55	9,27,89,280	73,81,396	37,54,478	4·05	44,23,109	—6,68,631	205	49·14
1891	692·55	9,28,38,358	85,64,209	49,42,458	5·32	47,25,666	+2,16,792	238	42·29
1892	692·55	9,51,44,770	85,42,836	50,16,329	5·27	52,79,411	—2,63,082	237	41·28
1893	741·11	10,09,17,292	87,15,926	50,17,053	4·97	55,01,058	—4,84,005	239	42·44
1894	796·64	10,28,87,184	1,05,18,836	57,36,138	5·58	63,11,201	—5,75,063	262	45·47
1895	797·18	10,65,05,148	1,02,94,880	52,55,948	4·93	64,26,370	—11,70,422	248	48·95
1896	830·15	10,92,69,485	86,97,076	43,50,907	3·98	61,30,729	—17,79,822	209	49·97
1897	891·97	11,44,19,239	85,15,856	36,96,778	3·23	59,77,486	—22,80,708	186	56·59
1898	1,030·36	11,66,56,000	98,51,599	53,07,727	4·55	58,76,247	—5,68,520	190	46·12
1899	1,030·36	12,23,50,210	1,11,38,990	60,76,595	4·97	59,75,202	+1,01,393	208	45·45
1900	1,101·56	12,57,60,656	1,15,15,132	55,91,727	4·45	62,28,185	—6,36,458	209	51·44
1901	1,118·94	12,89,85,151	1,32,54,991	72,20,007	5·60	63,12,044	+9,07,963	231	45·53
1902	1,119·24	13,66,82,842	1,31,65,792	64,11,336	4·69	64,79,103	—67,767	230	51·30
1903	1,180·79	14,54,28,164	1,39,49,922	72,31,862	4·97	68,40,953	+3,90,909	232	48·16
1904	1,237·65	14,96,63,929	1,52,96,206	71,33,117	4·76	70,54,120	+78,997	241	53·37
1905	1,244·65	15,37,92,910	1,53,85,913	63,43,667	4·12	71,68,431	—8,24,764	238	58·77
1906	1,292·16	15,71,99,731	1,64,67,329	78,15,731	4·97	75,66,010	+2,49,721	249	52·54
1907	1,302·83	16,40,20,116	1,81,93,069	65,62,413	4·00	70,99,564	—5,37,151	269	63·98
1908	1,302·83	17,17,49,978	1,61,61,543	50,29,153	2·93	74,73,210	—24,44,057	239	68·88
1909	1,310·52	17,78,51,571	1,61,86,594	45,93,282	2·58	76,42,849	—30,49,567	238	72·76
1910	1,406·75	18,58,11,981	1,83,03,844	88,80,832	4·78	78,34,486	+10,46,346	253	51·48
1911	1,513·77	19,51,23,398	2,03,88,454	1,04,88,468	5·38	80,09,802	+24,78,666	256	48·56
1912	1,604·14	20,17,91,276	2,45,19,400	1,39,76,826	6·92	90,21,621	+49,55,205	294	43·00
1st qr. of 1913	1,604·14	20,24,29,541	61,06,475	28,60,729	1·41	21,64,489	+6,96,240	293	53·15
1913-14*	1,638·33	21,64,74,673	2,41,23,950	1,23,21,631	5·69	91,48,838	+31,72,793	283	48·92
1914-15*	1,682·00	22,15,79,383	2,08,24,033	91,22,888	4·12	93,51,473	—2,28,585	238	56·71
1915-16	1,606·87	21,46,85,603	2,23,58,588	1,12,50,582	5·24	91,53,246	+20,97,336	268	49·68
1916-17	1,606·87	21,52,10,491	2,63,18,738	1,50,41,365	6·99	89,71,560	+60,69,805	318	42·85
1917-18	1,592·29†	21,52,66,333	2,85,32,134	1,76,54,269	8·20	91,89,367	+84,64,902	345	38·13

* Includes the Cawnpore-Banda railway.

†The decrease is due to the dismantlement of the Dhakia—Sambhal branch.

OUDH AND ROHILKHAND RAILWAY SYSTEM—*contd.*

Hardwar-Dehra railway (5′ 6″ gauge)—

Date of registration of the Company.—12th March 1897.

Progress in opening—

Section of railway.	Date of opening.	Miles.	Total.
1	2	3	4
Hardwar to Dehra	1-3-00	32·04	32·04

Details of construction—

Permanent-way.—The permanent-way consists of 75-lb. flat-footed I. S. R. steel rails on deodar, sâl, hard wood and Australian sleepers.

Ballast.—The line is ballasted throughout with stone.

Fencing.—The line is fenced throughout.

Curves.—There are no curves with a radius of less than 1,000 feet.

Gradients.—The ruling gradient is 1 in 75.

Agreement and contract—

Agreement, dated the 6th January 1897, *between the Secretary of State and Messrs. Gillanders, Arbuthnot and Company of Calcutta* (called "the Promoters"), as to the grant of a provisional concession for the construction of the Hardwar-Dehra Branch railway.

Contract, dated the 26th March 1897 (called the scheduled contract), *between the Secretary of State and the Hardwar-Dehra Railway Company,* as to the construction, maintenance and working of the Hardwar-Dehra Branch railway.

Main provisions of agreement and contract—

(i) *Land.*—Provided by the Government free of cost to the Company.

(ii) *Government aid.*—The line is the property of the Hardwar-Dehra Branch Railway Company, and was constructed, from funds supplied by the Company, by the Government, who maintain, stock and work it through the agency of the Oudh and Rohilkhand railway.

The Government guarantee interest at 3 per cent per annum on the capital expenditure, and also undertake to allow to the Company, in any year in which it does not receive the minimum dividend of 3 per cent from the earnings of the line, the sum of Rs. 3,600 for such year for or towards management and office expenses.

(iii) *Terms of working.*—For maintenance, provision of rolling-stock and working, the Oudh and Rohilkhand Railway Administration retains 50 per cent of the gross earnings of the Branch line.

(iv) *Distribution of profits.*—The surplus profits in each year remaining after repayment to the Government of the amount of the guaranteed interest for the year are to be divided equally between the Government and the Company.

(v) *Rates and fares.*—Certain maxima and minima have been fixed by the Government, between the limits of which the working agency (*viz.*, the Oudh and Rohilkhand railway) can vary the rates and fares quoted for goods and coaching traffic.

(vi) *Special obligations as to the conveyance of—*

(*a*) Mails, troops, high Government officials and Government stores.—
(*b*) Government bullion and coin, and the persons in charge thereof.— } Nil.

(vii) *Power of the Government to determine contract.*—The Government may determine the contract, on twelve months' notice, either on the 31st December 1919 or on the 31st December in the last year of any subsequent period of ten years, by paying to the Company a sum equal to 25 times the average yearly net earnings of the Company during the last preceding three years, provided that such sum shall not exceed by more than 20 per cent, nor is less than, the total capital expenditure.

(viii) *Power of the Company to surrender contract.*—Nil.

(ix) *Term of contract.*—None specified.

OUDH AND ROHILKHAND RAILWAY SYSTEM—*concld.*

Hardwar-Dehra railway (5′ 6″ gauge)—*concld.*

Statistics of working—

Year.	Mileage open at end of each year.	Total capital outlay, including suspense, to end of each year, i.e., outlay on (*i*) lines open, and (*ii*) lines partly or wholly under construction.	Gross earnings.	Net earnings.	Percentage of net earnings on total capital outlay given in column (3).	Interest.	Company's share of surplus profits (based on terms of contract) *attributable to each year.*	Gain or loss to the State *pertaining to each year.*	Earnings per mile per week.	Proportion of expenses to earnings.	Remarks.
1	2	3	4	5	6	7	8	9	10	11	12
	Miles.	Rs.	Rs.	Rs.		Rs.	Rs.	Rs.	Rs.		
1900.	32·04	25,67,093	1,60,485	80,243	3·13	...	...	...	115	50·00	Interest up to 1900 was charged to capital and net earnings of 1900 were credited to capital in reduction of interest charges.
1901.	32·04	28,12,301	2,13,456	1,06,728	3·80	84,220	11,254	+11,254	128	50·00	
1902.	32·04	28,36,486	2,52,485	1,26,242	4·45	85,048	20,597	+20,597	152	50·00	
1903.	32·04	28,44,541	2,62,719	1,31,360	4·62	85,260	23,050	+23,050	158	50·00	
1904.	32·04	29,12,992	2,63,612	1,31,806	4·52	86,777	22,515	+22,514	158	50·00	
1905.	32·04	29,20,650	3,13,476	1,56,738	5·37	87,590	34,574	+34,574	188	50·00	
1906.	32·04	29,24,284	3,34,110	1,67,055	5·71	87,688	39,683	+39,684	201	50·00	
1907.	32·04	29,27,942	3,86,565	1,93,283	6·60	87,822	52,730	+52,731	232	50·00	
1908.	32·04	29,44,092	3,76,334	1,88,167	6·39	88,185	49,991	+49,991	226	50·00	
1909.	32·04	29,65,357	3,68,624	1,84,312	6·21	88,734	47,789	+47,789	221	50·00	
1910.	32·04	29,85,633	4,04,443	2,02,221	6·77	89,548	56,337	+56,336	243	50·00	
1911.	32·04	30,10,716	4,31,161	2,15,581	7·16	90,017	62,782	+62,782	259	50·00	
1912.	32·04	30,18,164	4,40,299	2,20,149	7·29	90,541	64,804	+64,804	264	50·00	
1st qr. of 1913	32·04	30,18,790	1,21,302	60,651	2·01	22,641	19,005	+19,005	291	50·00	
1913-14.	32·04	30,22,601	4,85,346	2,42,673	8·03	90,621	76,026	+76,926	291	50·00	
1914-15.	32·04	30,26,584	4,66,506	2,33,253	7·71	90,749	71,252	+71,252	280	50·00	
1915-16.	32·04	30,27,840	5,09,355	2,54,678	8·41	90,825	81,926	+81,927	306	50·00	
1916-17.	32·04	30,34,255	5,54,382	2,77,691	9·15	91,021	93,385	+93,385	333	50·00	
1917-18	32·04	30,40,387	5,46,330	2,73,165	8·98	91,169	90,998	+90,998	328	50·00	

Cawnpore-Burhwal link (3′ 3⅜″ gauge)—

The construction of the Cawnpore-Burhwal (3′ 3⅜″ gauge) link was sanctioned as a part of the project for linking up the 3′ 3⅜″ gauge systems of Northern India.

Progress in opening—

Sections of railway.	Date of opening.	Miles.	Total.	Remarks.
1	2	3	4	5
Burhwal to Daliganj	24-11-96	*35·31		*Including the length, Burhwal to Bara Banki, 16·79 miles, laid on a mixed (5′ 6″ and 3′ 3⅜″) gauge.
Aishbagh to Cawnpore	25-4-97	45·03		
TOTAL	...	...	80·34	

Details of construction—

Permanent-way.—Where the line is not mixed gauge it is laid with new 50-lb. steel rails on sâl and deodar sleepers.

Ballast.—The line is ballasted throughout with kunkur, brick and mud stone.

Fencing.—The line is fenced throughout.

Curves.—The sharpest curve has a radius of 573 feet.

Gradients.—The ruling gradient is 1 in 400.

Contract—

The line is owned by the State. The Bengal and North-Western Railway Company exercises running powers over it under an agreement with the Oudh and Rohilkhand railway, dated the 21st February 1902, which provides that the Company will haul its trains and traffic over the link and pay to the Oudh and Rohilkhand railway 80 per cent, which has, with effect from the 1st July 1905, in pursuance of Railway Board's letter No. R. T. 178, dated the 30th June 1905, been reduced to 75 per cent of the gross receipts arising therefrom.

Statistics of working—

Included with the Oudh and Rohilkhand railway.

SOUTH INDIAN RAILWAY SYSTEM.

Chairman.—Sir Henry Kimber, Bart., M.P.
Managing Director.—Neville Priestley, Esq.
Offices.—Finsbury, Pavement House, London, E. C.
Date of registration of the Company.—1890.

The lines formerly owned and worked by the late Great Southern India and the Carnatic Railway Companies were amalgamated on the 1st July 1874, under the title of the South Indian railway which on the 1st January 1891 was purchased by the State and handed over, together with the Villupuram-Guntakal State railway, for working as one undertaking, to a new company—the existing South Indian Railway Company.

With effect from the 1st January 1908 the Jalarpet-Mangalore section of the former Madras railway including the Tirupattur-Krishnagiri, Morappur-Dharmapuri and the Nilgiri railways was incorporated in the undertaking of the South Indian Railway Company, who, from the same date, relinquished and made over to the amalgamated Madras and Southern Mahratta Railway Company the 3′ 3⅜″ gauge lines from Katpadi to Dharmavaram and from Pakala to Gudur, and obtained running powers over the Madras-Bangalore section of the Madras and Southern Mahratta railway. The Shoranur-Cochin Native State line was, on the same date, also transferred from the former Madras Railway Company to the South Indian Railway Company for working.

Lines comprised in the system.—The South Indian railway system is made up of—

	Open line.	Under construction or sanctioned for construction.	Total.
	Miles.	Miles.	Miles.
(*a*) South Indian railway (5′ 6″ gauge)	445·94	...	445·94
(*b*) Suramangalam-Salem railway (5′ 6″ gauge)	3·86	...	3·86
(*c*) South Indian railway (3′ 3⅜″ gauge)	881·49	...	881·49
(*d*) Nilgiri railway (3′ 3⅜″ gauge)	28·96	...	28·96
(*e*) Peralam-Karaikkal railway (3′ 3⅜″ gauge)	14·65	...	14·65
(*f*) Podanur-Pollachi railway (3′ 3⅜″ gauge)	25·04	...	25·04
(*g*) Pondicherry railway (3′ 3⅜″ gauge)	7·85	...	7·85
(*h*) Shoranur-Cochin railway (3′ 3⅜″ gauge)	64·75	...	64·75
(*i*) Tanjore District Board railway (3′ 3⅜″ gauge)	111·94	41·08	153·02
(*j*) Tinnevelly-Quilon (Travancore) railway (British section) (3′ 3⅜″ gauge)	50·41	...	50·41
(*k*) Tinnevelly-Quilon (Travancore) railway (Native State section) (3′ 3⅜″ gauge)	95·96	...	95·96
(*l*) Morappur-Hosur railway (2′ 6″ gauge)	73·40	...	73·40
(*m*) Tirupattur-Krishnagiri railway (2′ 6″ gauge)	25·38	...	25·38
(*n*) Manamadura-Sivaganga railway (3′ 3⅜″ gauge)	...	12·43	12·43
(*o*) Tinnevelly-Tiruchendur railway (3′ 3⅜″ gauge)	...	38·18	38·18
(*p*) Trichinopoly-Pudukkottai railway (3′ 3⅜″ gauge)	...	32·00	32·00
Total	1,829·63	123·69	1,953·32

Running powers—

Home line over foreign line.—
Madras to Bangalore, Madras and Southern Mahratta railway, for passenger and goods trains . . . 219·00

South Indian railway (5′ 6″ gauge)—

Progress in opening—

Sections of railway.	Date of opening.	Miles.	Total.	Grand total.
	2	3	4	5
Main line—				
West outer signal at Jalarpet to Tirupattur	23-5-60	4·65		
Tirupattur to Salem	1-2-61	69·98		
Salem to Sankaridrug	1-12-61	23·68		
Sankaridrug to Podanur	12-5-62	71·18		
Podanur to Pattambi	14-4-62	64·96		
Pattambi to Kuttippuram	23-9-61	11·50		
Kuttippuram to Tirur	1-5-61	9·39		
Tirur to Kadalundi	12-3-61	16·31		
Kadalundi to Calicut	2-1-88	9·25		
Calicut to Badagara	1-10-01	28·95		
Badagara to Tellicherry	1-5-02	13·50		
Tellicherry to Cannanore	20-5-03	13·00		
Cannanore to Azhikal	15-3-04	4·10		
Azhikal to Hosdrug	21-8-06	34·52		
Hosdrug to Kasaragod	1-10-06	14·22		
Kasaragod to Kumbla	17-11-06	7·62		
Kumbla to Mangalore	3-7-07	20·91	417·72	
Mettupalaiyam branch—				
Podanur to Coimbatore	1-2-73	3·78		
Coimbatore to Mettupalaiyam	31-8-73	21·97	25·75	
Palghat branch—				
Olavakkot to Palghat	2-1-88	2·47	2·47	
TOTAL	...	...	...	445·94

Details of construction—

Permanent-way.—The rails are 76-lb. and 80-lb. bull-headed, 75-lb. double-headed and 75-lb. and 60-lb. flat-footed steel. The sleepers are cast iron pots, irumbogam, sâl, irool and jarrah wood.

Ballast.—The line is ballasted with stone and sand, chiefly the former.

Fencing.—The line is fenced throughout.

Curves.—The sharpest curve is of 700 feet radius.

SOUTH INDIAN RAILWAY SYSTEM—*contd.*

South Indian railway (5′ 6″ gauge)—*concld.*

Details of construction—*concld.*

Gradients.—The ruling gradient of the greater part of the line is about 1 in 100, except on Mallapuram Ghat where it is 1 in 74 with a 1 in 70 banking; on the Walayar Ghat where it is 1 in 66 with a 1 in 62 banking; on the Azhikal-Mangalore section where it is 1 in 90; and on the Podanur-Mettupalaiyam section where it is 1 in 80.

Contract—

Up to and including the 31st December 1907 the line formed an integral part of the former Madras railway. With effect from the 1st January 1908 it was, in terms of the contract of the 2nd March 1909, between the Secretary of State and the South Indian Railway Company, made over to the Company to be worked and maintained as an integral part of the undertaking referred to in the principal contract of the 24th November 1890, the main provisions of which are noted under South Indian railway, 3′ 3⅜″ gauge.

Statistics of working—

Year.	Mileage open at end of each year.	Total capital outlay, including suspense, to end of each year, i.e., outlay on (i) lines open, and (ii) lines partly or wholly under construction.	Gross earnings.	Net earnings.	Percentage of net earnings on total capital outlay given in column (3).	Earnings per mile per week.	Proportion of expenses to earnings.
1	2	3	4	5	6	7	8
	Miles.	Rs.	Rs.	Rs.		Rs.	
1908 .	445·94	6,42,27,971	57,25,148	25,25,034	3·93	247	55·90
1909 .	445·94	6,43,58,255	62,30,385	28,18,753	4·38	269	54·76
1910 .	445·94	6,61,74,084	63,39,154	24,95,532	3·77	273	60·63
1911 .	445·94	6,57,73,175	69,66,156	38,13,140	5·80	300	45·26
1912 .	445·94	6,68,13,600	74,16,071	35,22,022	5·27	320	52·51
1st qr. of 1913. .	445·94	6,72,88,570	18,84,615	5,32,409	0·79	325	71·75
1913-14 .	445·94	7,01,73,755	79,54,816	29,91,752	4·26	343	62·39
1914-15 .	445·94	7,13,55,000	78,17,228	32,06,665	4·49	337	58·98
1915-16 .	445·94	7,26,72,632	84,90,992	45,00,975	6·19	366	46·99
1916-17 .	445·94	7,20,78,897	98,22,191	49,48,932	6·87	424	49 61
1917-18 .	445·94	7,18,73,597	1,10,05,446	64,88,041	9·03	475	41 05

Suramangalam-Salem railway (5′ 6″ gauge—

Sanction to the construction of this line by the South Indian Railway Company on behalf of the District Board of Salem was conveyed in Railway Board's Notification No. 72, dated the 23rd March 1915.

Progress in opening—

Section of Rai way.	Date of opening.	Miles.	Total.
1	2	3	4
Suramangalam to Salem	1-6-17	3 96	3·86

Details of construction—

Permanent-way.—The permanent-way consists of 75-lb. double-headed steel rails laid on Kongu sleepers.

Ballast.—The line is ballasted with moorum.

Fencing.—The line is unfenced except at Sevvayypettai station yard.

Curves.—The sharpest curve is of 1,432·5 feet radius.

Gradients.—The ruling gradient is 1 in 100.

SOUTH INDIAN RAILWAY SYSTEM.—*contd.*

Suramangalam-Salem railway (5′ 6″ gauge)—*concld.*

Agreement—

The line was constructed and is being maintained and worked under the terms of an agreement which is under consideration.

Statistics of working—

Year.	Mileage open at end of the year.	Total capital outlay, including suspense, to end of the year, *i.e.*, outlay on (i) lines open, and (ii) lines partly or wholly under construction.	Gross earnings.	Net earnings.	Percentage of net earnings on total capital outlay given in column (3).	Earnings per mile per week.	Proportion of expenses to earnings.
1	2	3	4	5	6	7	8
	Miles.	Rs.	Rs.	Rs.		Rs.	
1917-18	3·86	4,71,972	13,451	3,730	0·79	81	72·27

South Indian railway (3′ 3⅜″ gauge)—

Progress in opening—

Sections of railway.	Date of opening.	Miles.	Total.	Grand total.	Remarks.
1	2	3	4	5	6
MADRAS-TUTICORIN SECTION—					
Main line—					
Madras Beach Junction to Madras Beach	15-1-00	0·11			
Madras Beach old to Park	1-1-79	1·82			
Madras (Park) to Tindivanam	1-9-76	76·05			
Tindivanam to Cuddalore (Old town)	1-1-77	52·01			
Cuddalore (Old town) to Porto Novo	1-7-77	17·15			
Porto Novo to Chidambaram	1-10-78	6·73			
Chidambaram to Coleroon	1-7-79	4·57			
Coleroon to Shiyali	1-1-78	6·06			
Shiyali to Mayavaram	1-7-77	12·24			
Mayavaram to Tanjore	15-2-77	43·76			
Tanjore to Trichinopoly Junction	11-3-62	*31·14			
Trichinopoly Junction to Madura	1-9-75	96·04			
Madura to Mandapam	1-8-02	89·50			
Mandapam to Pamban	1-1-14	3·12			
Pamban to Rameswaram	11-9-06	6·95			
Rameswaram to Dhanushkodi Jetty	0 12-08	11·30			
Dhanushkodi Jetty to Dhanushkodi Point	1-12-14	1·57			
Branches—			460·12		
Arkonam branch—					
Chingleput to Walajabad	1-8-80	13·66			
Walajabad to Conjeeveram	1-1-81	7·94			
Conjeeveram to Arkonam	8-5-65	†17·65			
Pondicherry branch—			39·25		
Villupuram to the Gingee river, inclusive of the bridge over the river .	15-12-79	16·47			
NAGORE BRANCH—			16·47		
Tanjore to Tiruvallur	2-12-61	‡33·83			
Tiruvallur to Nagapatam	15-7-61	§14·33			
Nagapatam to Nagore	1-12-99	4·67	52·83		
Carried over .	...	...	568·67		

*Originally constructed on the 5′6″ gauge, but was converted to 3′ 3⅜″ gauge—Tanjore to Budalur, 10·85, on 10th July 1875 and Budalur to Trichinopoly Jn., 20·29, on 17th July 1875.

†Originally constructed on the 5′ 6″ gauge, but was converted to 3′ 3⅜″ gauge, in sections, on 12th, 13th and 14th July 1878.

‡Originally constructed on the 5′6″ gauge, but was converted to 3′ 3⅜″ gauge—Tanjore to Nidamangalam, 18·73, on 3rd July 1875 and Nidamangalam to Tiruvallur, 15·10, on 26th June 1875.

§ Originally constructed on the 5′6″ gauge, but was converted to 3′3⅜″ gauge on 19th June 1875.

SOUTH INDIAN RAILWAY SYSTEM—*contd.*

South Indian railway (3′ 3⅜″ gauge)—*contd.*

Progress in opening—*concld.*

Sections of railway.	Date of opening.	Miles.	Total.	Grand total.	Remarks.
1	2	3	4	5	6
Brought forward .	...	...	568·67		
Pulliarpati Quarry branch—					
Tanjore to Pulliarpati quarry buffer end	1-7-98	4·57	4·57		
Erode branch—					
Trichinopoly Junction to Fort	11-3-62	2·52			
Trichinopoly Fort to Karur	3-12-66	44·65			
Karur to Kodumudi	1-7-67	16·71			
Kodumudi to Erode	1-1-68	23·53	*87·41		*Originally constructed on the 5′6″ gauge, but was converted to 3′3⅜″ gauge— Trichinopoly Junction to Karur on 1st July 1879 and Karur to Erode on 16th December 1879.
Tuticorin branch—					
Madura to Tuticorin	1-1-76	98·71			
Tuticorin to Foreshore	7-8-99	0·41	99·12		
Tinnevelly branch—					
Maniyachi to Tinnevelly	1-1-76	18·00	18·00		
Wharf branch—					
Cuddalore (Old town) to Wharf	7-8-99	1·54	1·54		
Capper Quarry branch—					
Junction with main line to Capper Quarry	15-4-00	0·86	0·86		
Salt branch—					
Tuticorin to buffer end of Livingepuram	12-11-99	2·39	2·39		
VILLUPURAM-KATPADI SECTION—					
Main line—					
Villupuram to Tiruvannamalai	17-11-90	41·80			
Tiruvannamalai to Katpadi	18-3-91	57·13	98·93		
GRAND TOTAL OPEN MILEAGE .	...	...	...	881·49	

Details of construction—

Permanent-way.—The rails in use are 52-lb. and 50-lb. bull-headed steel, 56-lb., 55-lb. and 41¼-lb. flat-footed steel, 40·3-lb. flat-footed and 68-lb. double-headed iron. The 55-lb. rails are laid on the Pamban viaduct only. The sleepers are cast iron pot, steel transverse, sâl, pynkado, west coast teak, jarrah and irool wood.

Ballast.—The line is ballasted throughout, partly with broken stone and partly with laterite and gravel interspersed.

Fencing.—The line is fenced, with the exception of the Villupuram-Katpadi, Madura-Mandapam and Pamban-Dhanushkodi sections which are fenced only at stations.

Curves.—The sharpest curve is of 500 feet radius.

Gradients.—The ruling gradient is 1 in 200, except on the length between Madras Beach and Fort and on the Villupuram-Katpadi, Trichinopoly-Madura and Karur-Erode sections where it is 1 in 100.

Contracts—

Dated the 24th November 1890 (called the principal contract), *between the Secretary of State and the South Indian Railway Company*, for maintaining and working from the 1st January 1891, the railways which on the 31st December 1890 formed the undertaking of the former Company and completing and working the Villupuram-Guntakal railway.

Dated the 27th June 1901 (supplemental to the principal contract), *between the Secretary of State and the South Indian Railway Company*, relating to the construction and working of Pamban and Travancore branches.

Dated the 8th April 1903 (supplemental to the principal contract), *between the Secretary of State and the South Indian Railway Company*, as to the adoption of 1*s.* 4*d.* per rupee as the "prescribed" rate of exchange.

Dated the 2nd March 1909 (supplemental to the principal contract), *between the Secretary of State and the South Indian Railway Company*, providing for the relinquishment from 1st January 1908 of the section of the Company's line north of Katpadi and the transfer to the Company from the same date of the Jalarpet-Mangalore section of the former Madras railway.

Dated the 26th October 1909 (supplemental to the principal contract), *between the Secretary of State and the South Indian Railway Company*, for the construction and working as an integral part of the undertaking of the Dharmapuri-Hosur extension of the Morappur-Dharmapuri railway.

SOUTH INDIAN RAILWAY SYSTEM—*contd.*

South Indian railway (3′ 3⅜″ gauge)—*contd.*

Contracts—*concld.*

Dated the 21st December 1910, *between the Secretary of State and the South Indian Railway Company*, supplemental to and continuing with further modifications, with effect from 1st January 1911, the principal contract of the 24th November 1890 as modified by previous supplemental contracts.

Dated the 23rd April 1914 (supplemental to the contracts of 1901, 1903, 2nd March and 26th October 1909 and 1910), *between the Secretary of State and the South Indian Railway Company*, as to the adoption of the Government financial year for the preparation of accounts.

Main provisions of contracts—

(i) *Land.*—Provided by the Government at the cost of capital.

(ii) *Government aid.*—Guarantee of 3½ per cent in sterling on the Company's share capital of £1,000,000, and on any paid-up stock or share (other than preference) capital thereafter issued by the Company with the sanction of the Government (not including premia paid thereon).

(iii) *Distribution of profits.*—Under section 60 of the principal contract of the 24th November 1890 as amended by section 25 of the supplemental contract of the 21st December 1910, the net revenue receipts of each half-year are applied, in the following manner and order :—

In payment to Government—

(*a*) of interest at the rate of 3½ per cent per annum for such half-year, paid by Government under section 41 of the principal contract, *i.e.*, under (ii) above;

(*b*) of the amount paid by Government in respect of interest for such half-year, upon the sum of £125,000 irredeemable debenture stock of the former Company; upon the debentures for £375,000 and £73,000, respectively, issued for the purposes of the Pamban Branch; and upon any debenture stock or debentures or preference stock or shares issued by the Company after the 31st December 1910;

(*c*) of interest for such half-year at the rate of 3½ per cent per annum on the amount of the Government capital as shown in the Government capital account for the division of such receipts; and

(*d*) the residue, if any, is divisible between Government and the Company in the ratio of the average amounts, calculated as prescribed, of the capital contributed by the Government and the Company, the Government capital being the amount shown in the Government Capital Account for division of net revenue receipts and the Company's capital the amounts of its stock and share capital (other than preference capital) paid up or credited as paid up, excluding any premia received, subject to the proviso that if the amount of the Company's share so arrived at should in the combined halves of any of the years 1911, 1912 and 1913 be less than interest for such year at the rate of 10 shillings per cent on its capital, the Government shall make up the deficiency.

(iv) *Rates and fares.*—The Government will from time to time authorise maxima and minima rates, and prescribe the several classes and descriptions of passengers and goods to which such rates shall be respectively applicable, as well as the extent to which, within the authorised maxima and minima, the Company may vary the said rates.

The Company have power to quote through rates and fares for both goods and passengers from the Jalarpet-Mangalore section to the Madras-Bangalore section of the Madras and Southern Mahratta railway system (but not in the reverse direction), divisible between the two companies in mileage proportion without deduction of terminals or other special charges, except for traffic to and from the Nilgiri line the mileage over which is reckoned at twice its actual mileage in the division of such rates. No rate or fare to Madras so quoted should, without the prior sanction of the Government, be higher than that which, for the same class or description of traffic, was in force on the 1st January 1910.

(v) *Special obligations as to the conveyance of—*

(*a*) Mails, troops, police, high Government officials and Government stores.—To be conveyed on the same general conditions as on State railways of the same gauge.

(*b*) Government bullion and coin, and the persons in charge thereof.—To be conveyed at special rates to be approved by Government.

(vi) *Services for any Department of the Travancore Durbar.*—On such portion of the Travancore Branch as runs through the Native State of Travancore, to be performed on the same general conditions as on other 3′ 3⅜″ gauge State railways and at rates approved by the Government.

(vii) *Power of the Government to determine contract.*—The railway and all its appurtenances are absolutely the property of Government, who may terminate the contract on the 31st December 1945, or at the end of any succeeding fifth year, by giving to the Company in England not less than 12 calendar months' previous notice; also at any time on 6 months' notice should the Company fail to observe its obligations or the undertaking be worked at a loss for not less than three half-years continuously.

On the expiration or determination of the contract the Government are to take possession of the railway and all its appliances, etc., repaying the Company at par its capital of £1,000,000 and any further capital raised by it and paid to Government but excluding any premia paid thereon, and receiving from the Company any unexpended balance of the capital advanced by Government for the purposes of the undertaking as well as for the Travancore Branch.

SOUTH INDIAN RAILWAY SYSTEM—*contd.*

South Indian railway (3′ 3⅜″ gauge)—*concld.*

Main provisions of contracts—*concld.*

(viii) *Power of the Company to surrender contract.*—Nil.

(ix) *Term of contract.*—55 years, *i.e.*, from 1st January 1891 to 31st December 1945, subject to (vii).

Statistics of working (Those for the periods prior to 1891 will be found in Appendix 38 to the Railway Administration Report for 1907).—

Includes the South Indian (5′ 6″ gauge), Nilgiri, Morappur-Hosur and Tirupattur-Krishnagiri railways from 1908.

Year.	Mileage open at end of each year.	Total capital outlay, including suspense, to end of each year, *i.e.*, outlay on (i) lines open, and (ii) lines partly or wholly under construction.	Gross earnings.	Net earnings.	Percentage of net earnings on total capital outlay given in column (3).	Interest.	Company's share of surplus profits (based on terms of contract) *attributable to each year.*	Percentage of Company's share of net earnings (surplus profits *plus* guaranteed interest on share capital) on Company's capital.	Gain or loss to the State *pertaining to each year.*	Earnings per mile per week.	Proportion of expenses to earnings.
1	2	3	4	5	6	7	8	9	10	11	12
	Miles.	Rs.	Rs.	Rs.		Rs.	Rs.		Rs.	Rs.	
1891	900·76	7,72,11,806	70,36,756	24,29,625	3·15	35,89,726	70,901	...	—12,31,012	154	65·47
1892	1,105·19	7,82,83,761	77,14,996	28,53,591	3·65	39,51,093	76,586	...	—11,74,088	137	63·01
1893	1,041·51	7,63,31,043	80,92,415	31,15,918	4·08	38,58,152	1,41,676	...	—8,83,910	149	61·50
1894	1,041·51	7,64,13,362	80,46,559	32,83,865	4·30	42,81,812	1,55,059	...	—11,53,006	148	59·19
1895	1,041·59	7,68,38,604	89,14,947	38,96,987	5·07	42,77,578	2,60,599	...	—6,41,190	165	56·29
1896	1,041·59	7,67,63,325	89,45,581	40,27,489	5·25	40,60,677	2,86,156	...	—3,19,344	165	54·98
1897	1,041·59	7,66,46,858	91,81,409	42,96,757	5·61	38,76,142	3,37,792	...	+ 82,823	170	53·20
1898	1,017·88	7,45,21,873	84,67,581	38,35,527	5·15	37,49,521	2,66,184	...	—1,80,178	157	54·70
1899	1,030·53	7,53,12,929	84,74,461	39,83,540	5·29	36,38,393	3,01,776	...	+ 43,371	159	52·99
1900	1,033·63	7,62,95,528	89,04,825	43,97,916	5·76	36,62,994	3,68,699	...	+3,66,223	166	50·61
1901	1,033·63	8,04,49,712	1,01,44,657	54,15,176	6·73	37,23,736	5,43,890	...	+11,47,550	188	46·62
1902	1,123·13	8,18,32,571	1,05,51,072	56,87,510	6·95	38,18,209	5,33,246	...	+13,36,055	189	46·10
1903	1,123·13	8,31,40,603	1,22,14,138	72,76,216	8·75	39,06,079	7,89,547	...	+25,80,590	209	40·43
1904	1,123·13	8,45,16,652	1,25,12,321	69,62,790	8·24	40,55,602	7,16,725	...	+21,90,463	214	44·35
1905	1,123·05	8,62,95,191	1,29,34,476	65,77,330	7·62	40,05,713	6,30,608	...	+19,41,014	221	49·15
1906	1,130·00	8,91,97,605	1,32,75,295	58,92,976	6·61	40,92,722	4.94,281	...	+13,05,973	227	55·61
1907	1,129·85	9,06,35,408	1,41,19,421	71,69,813	7·91	38,76,608	6,71,818	...	+26.21,387	240	49·22
1908	1,395·61	15,07,19,882	2,04,61,326	94,20,016	6·25	46,89,556	6,98,860	...	+40,31,600	282	53·96
1909	1,395·61	15.57.78,715	2.17.41,647	1,01,90,046	6·54	49,52,436	7,44,562	...	+44,93,048	300	53·13
1910	1,395·61	16,08,95,627	2,24,59,591	1,02,34,257	6·36	51,05,988	7,13,317	...	+44,14,952	309	54·43
1911	1,395·61	16,28,91,154	2,49,91,786	1,24,16,673	7 62	52,77,315	3,20,622	5·62	+ 68,18,736	344	50·32
1912	1,395·61	17,03,55,986	2,70,84,141	1,31,63,987	7·73	54,89,120	3,58,165	5·87	+ 73,16,702	373	51·39
1st qr. of 1913.	1,395·61	17,32,28,471	68,27,737	27,15,071	1·49	14,07,085	45,705	1·17	+ 12,62,281	376	59·85
1913-14	1,453·60	18,26,41,473	2,80,70,002	1,17,27,795	6·42	78,71,656	2,24,394	4·97	+ 36,31,745	373	58·22
1914-15	1,455·17	18,75,61,932	2,72,73,211	1,15,22,805	6·14	63,34,802	1,79,159	4·66	+50,08,844	359	57·75
1915-16	1,455·17	18,96,35,625	2,95,90,946	1,49,91,076	7·90	65,33,607	4,32,328	6·38	+80,25,141	389	48·84
1916-17	1,455·17	18,78,31,769	3,23,83,253	1,62,25,740	8·64	64,44,493	5,17.105	6·95	+92,64,142	425	49·89
1917-18	1,455·17	18,77,65,936	3,53,66,666	2,02,02,479	10·76	65,29,673	*8,02,782	8·85	+1,28,70,024	465	42·88

* The share of loss recoverable from the Company in working the British section of the Tinnevelly-Quilon (Travancore) railway is not deducted from this amount. The surplus profits were divided between the Government and the Company in the proportion of Rs. 19,50,00,000 to Rs. 1,50,00,000 or 13 : 1.

Nilgiri railway (3′ 3⅜″ gauge)—

The original Nilgiri Railway Company was registered on the 30th September 1885 with nominal capital of Rs. 25,00,000, and a contract was executed between the Secretary of State and that Company on the 26th February 1886. The original Company went into liquidation in April 1894 and a new Company was formed in February 1896 to purchase the line from the former Company and supply the capital required to complete it and to construct the proposed extension to Ootacamund. The line from Mettupalaiyam to Coonoor was completed by the new Company and opened for traffic on the 15th June 1899. On the offer of the new Company to sell the line it was purchased by the Government for £235,000 on the 1st January 1903. The extension to Ootacamund was constructed by the Government.

Progress in opening—

Sections of railway.	Date of opening.	Miles.	Total.
1	2	3	4
Mettupalaiyam to Coonoor	15-6-99	16·99	
Coonoor to Fernhill	15-9-08	10·86	
Fernhill to Ootacamund	15-10-08	1·11	
TOTAL	...	...	28·96

SOUTH INDIAN RAILWAY SYSTEM—*contd.*

Nilgiri railway (3′ 3⅜″ gauge)—*concld.*

Details of construction—

Permanent-way.—The permanent-way consists of flat-footed steel rails, 50 lbs. to the yard, laid on pynkado sleepers. Between Kallar and Coonoor (12 miles) there is also a central rack rail.

Ballast.—Rack section is ballasted with clean broken granite and the Adhesion section with hard gneiss.

Fencing.—The line is unfenced throughout.

Curves.—The sharpest curve is of 318 feet radius.

Gradients.—The ruling gradient is 1 in 12·5 on the Rack section and 1 in 25 on the Adhesion section.

Contract—

The railway was worked by the former Madras Railway Company up to the 31st December 1907 on behalf of the Government. With effect from 1st January 1908 it was made over to the South Indian Railway Company as a part of the Jalarpet-Mangalore section for working as an integral part of their undertaking in terms of the contract of 2nd March 1909 between the Secretary of State and the Company with the condition that the South Indian Railway Company are not to pay interest on the capital cost of the Coonoor-Ootacamund railway incurred either before or after 1st January 1908.

Statistics of working (Those for the periods prior to 1908 will be found in Appendix 38 to the Railway Administration Report for 1907).—

Year.	Mileage open at end of each year.	Total capital outlay, including suspense, to end of each year, *i.e.*, outlay on (i) lines open, and (ii) lines partly or wholly under construction.	Gross earnings.	Net earnings.	Percentage of net earnings on total capital outlay given in column (3).	Earnings per mile per week.	Proportion of expenses to earnings.
1	2	3	4	5	6	7	8
	Miles.	Rs.	Rs.	Rs.		Rs.	
1908 ...	28·96	67,82,028	3,36,030	42,991	0·63	223	87·21
1909 ...	28·96	70,32,241	4,08,791	53,657	0·76	271	86·87
1910 ...	28·96	75,94,023	4,57,097	72,441	0·95	304	84·15
1911 ...	28·96	77,29,506	4,94,851	1,24,062	1·61	329	74·81
1912 ...	28·96	78,32,496	5,21,687	1,16,443	1·49	346	77·68
1st qr. of 1913.	28·96	78,84,535	1,25,409	25,923	0·33	333	79·33
1913-14	28·96	81,18,956	5,38,969	98,376	1·21	357	81·75
1914-15	28·96	82,82,093	5,74,861	2[illegible],957	0·29	382	95·83
1915-16	28·96	83,64,280	6,95,971	89,920	1·08	462	87·08
1916-17	28·96	83,89,102	7,79,928	2,69,516	3·21	518	65·44
1917-18	28·96	83,95,163	9,03,235	3,35,878	4·00	600	62·81

Peralam-Karaikkal railway (3′ 3⅜″ gauge)—

The line is partly in British and partly in French territory and was constructed (by the agency of the South Indian Railway Company) with the object of placing the town and port of Karaikkal in communication with the railway system of Southern India.

Progress in opening—

Section of railway.	Date of opening.	Miles.	Total.
1	2	3	4
Peralam to Karaikkal	14-3-98	14·65	14·65

Details of construction—

Permanent-way.—The permanent-way consists of 41¼-lb. flat-footed steel rails and 40·3-lb. flat-footed iron rails for a length of 1·45 miles only, laid on wooden and steel transverse sleepers.

Ballast.—The line is ballasted with laterite.

Fencing.—The line is fenced only at stations.

Curves.—There are no curves with a radius of less than 1,000 feet.

Gradients.—The ruling gradient is 1 in 200.

Contract—

Dated the 27th March 1902, *between the Government of the French Settlements in India and the South Indian Railway Company*, for the working of the Peralam-Karaikkal railway.

SOUTH INDIAN RAILWAY SYSTEM—*contd.*

Peralam-Karaikkal railway (3' 3⅜" gauge)—*concld.*

Main provisions of contract—

(i) *Land.*—In French territory provided by the Colonial (French) Government free of cost but subject to a land tax as for private property : in British territory by the British Government free of cost on condition that the proprietary rights remain vested in the British Government.

(ii) *Government aid.*—The railway was constructed at cost price by the South Indian Railway Company at the request and on behalf of the Colonial (French) Government, and is worked and maintained by the Company who provide the rolling-stock required for the traffic of the Peralam-Karaikkal railway.

(iii) *Terms of working.*—
(iv) *Distribution of profits.*— } Direction, maintenance and working expenses, excluding the cost of repairing damages due to any extraordinary casualty and new minor works not costing more than Rs. 1,000 on the system, are calculated at the same proportion of the gross receipts of the Peralam-Karaikkal railway as obtains half-yearly on the Company's system, including worked lines, as a whole, *plus* the cost of repairing damages due to any extraordinary casualty and of New Minor Works on the branch, 5 per cent of the gross receipts of the Branch for the use of the Company's rolling-stock and 5 per cent per annum for interest on Rs. 30,000 which is taken as representing the Branch line's share of the Company's outlay on revenue and other stores and workshop buildings and machinery.

The " net earnings " so arrived at are paid every half-year to the Colonial (French) Government :

Provided always that if, at any time, the working of the Peralam-Karaikkal railway involves an actual loss to the Company, the Colonial (French) Government shall make good such loss.

(v) *Rates and fares.*—To be agreed to between the Company and the Colonial (French) Government, but should not be less than the minima actually in force on the Company's undertaking.

(vi) *Special obligations as to the conveyance of—*

(*a*) Mails, troops, police, high Government officials and Government stores.—
(*b*) Government bullion and coin, and the persons in charge thereof.— } Not specified.

(vii) *Power of Colonial (French) Government to determine contract.*—
(viii) *Power of the Company to determine contract.*— } Determinable by either party on giving to the other 12 months' previous notice expiring on the 30th June or 31st December in any year.

(ix) *Term of contract, if not determined under* (vii) *or* (viii).—Not specified.

Statistics of working (Those for the periods prior to 1908 will be found in Appendix 38 to the Railway Administration Report for 1907.)—

Year.	Mileage open at end of each year.	Total capital outlay, including suspense, to end of each year, *i.e.*, outlay on (i) lines open, and (ii) lines partly or wholly under construction.	Gross earnings.	Net earnings.	Percentage of net earnings on total capital outlay given in column (3).	Earnings per mile per week.	Proportion of expenses to earnings.
1	2	3	4	5	6	7	8
	Miles.	Rs.	Rs.	Rs.		Rs.	
1908	14·65	7,23,786	43,948	14,361	1·98	58	67·32
1909	14·65	7,23,786	46,125	13,590	1·88	61	70·54
1910	14·65	7,23,786	44,070	—517	...	58	101·78
1911	14·65	7,23,786	51,162	17,519	2·42	67	65·76
1912	14·65	7,23,786	61,431	19,716	2·72	81	67·91
1st qr. of 1913.	14·65	7,23,786	13,500	—704	...	71	105·21
1913-14	14·65	7,23,786	63,513	21,393	2·96	83	66·32
1914-15	14·65	7,23,786	66,464	20,041	2·77	87	69·85
1915-16	14·65	7,23,786	65,771	23,026	3·18	86	64·99
1916-17	14·65	7,23,786	64,917	23,187	3·06	85	65·85
1917-18	14·65	7,23,786	64,309	21,584	2·98	84	66·44

Podanur-Pollachi railway (3' 3⅜" gauge)—

The construction of this line by the South Indian Railway Company from funds to be provided by the District Board of Coimbatore was authorised in Railway Board's telegram No. 470 R.P., dated the 19th November 1913.

Progress in opening—

Section of railway.	Date of opening.	Miles.	Total.
1	2	3	4
Podanur to Pollachi	15-10-15	25·04	25·04

SOUTH INDIAN RAILWAY SYSTEM—*contd.*

Podanur-Pollachi railway (3′ 3⅜″ gauge)—*concld.*

Details of construction—

Permanent-way.—The line is laid with 41¼-lb. flat-footed steel rails on hardwood (irool) sleepers.

Ballast.—The line is ballasted with moorum, except for 6 miles where field stones and Kunkar are used.

Fencing.—Only the Pollachi station yard is fenced.

Curves.—The sharpest curve is of 955 feet.

Gradients.—The ruling gradient is 1 in 70.

Agreement—
Main provisions of agreement— } The line was constructed and is being maintained and worked under the terms of an agreement which is under consideration.

Statistics of working—

Year.	Mileage open at end of each year.	Total capital outlay, including suspense, to end of each year, *i.e.*, outlay on (*i*) lines open and (*ii*) lines partly or wholly under construction.	Gross earnings.	Net earnings.	Percentage of net earnings on total capital outlay given in column (3).	Earnings per mile per week.	Proportion of expenses to earnings.
1	2	3	4	5	6	7	8
	Miles.	Rs.	Rs.	Rs.		Rs.	
1915-16 .	25·04	11,09,181	63,702	34,178	3·08	106	46·35
1916-17 .	25·04	10,48,834	1,60,792	81,972	7·82	123	49·02
1917-18 .	25·04	11,37,252	1,80,127	94,319	8·29	138	47·64

Pondicherry railway (3′ 3⅜″ gauge)—

The line is in the French territory and was constructed (by the Pondicherry Railway Company under the supervision of the South Indian Railway Company) with the object of placing the town and port of Pondicherry in communication with the railway system of Southern India and of developing the resources of the territory.

Progress in opening—

Section of railway.	Date of opening.	Miles.	Total.
1	2	3	4
East bank of the Gingee river to Pondicherry	15-12-79	7·85	7·85

Details of construction—

Permanent-way.—The line is laid with 41¼-lb. flat-footed steel rails on wooden sleepers, except between miles 117 and 118 where 50-lb. bull-headed steel rails are laid on cast iron pot sleepers.

Ballast.—The line is ballasted with stone.

Fencing.—The line is fenced.

Curves.—The sharpest curve is of 495 feet radius.

Gradients.—The ruling gradient is 1 in 200.

Agreement and contract—

Agreement, dated the 30th December 1890, *between the South Indian Railway Company and the Pondicherry Railway Company*, for maintenance and working.

Despatch from the Secretary of State, No. 19 Ry., dated the 17th March 1895, intimating the renewal of the agreement by the parties thereto.

Contract, dated the 23rd April 1914 (supplemental to the principal contract of 1890), *between the Secretary of State and the South Indian Railway Company*, as to the adoption of the Government financial year for the preparation of accounts.

Main provisions of agreement—

(i) *Land.*—Not specified.

(ii) *Government aid.*—The railway (which was constructed by the Pondicherry Railway Company) is maintained, worked and provided with rolling-stock by the South Indian Railway Company as an integral part of their undertaking—except only as to such works required for the accommodation and extension of traffic on the Pondicherry line which the Pondicherry Railway Company would have had to construct had they been themselves working their own line, which the latter undertake to make at their own cost to the satisfaction of the South Indian Railway Company.

(iii) *Terms of working.*— } Maintenance and working expenses are charged for at the same percent-
(iv) *Distribution of profits.*— } age of the gross receipts of the Pondicherry railway as obtains on the South Indian Railway Company's undertaking including the Pondicherry line—duty, if any, payable to the Colonial (French) Government and direction and office expenses in England being excluded from the calculation. The balance is payable half-yearly to the Pondicherry Railway Company.

SOUTH INDIAN RAILWAY SYSTEM—*contd.*

Pondicherry railway (3′ 3⅜″ gauge)—*concld.*

Main provisions of agreement—*concld.*

(v) *Rates and fares.*—
(vi) *Special obligations as to the conveyance of.*—
(a) Mails, troops, police, high Government officials, and Government stores.—
(b) Government bullion and coin, and the persons in charge thereof.—
} To correspond with those for the time being in force on the South Indian Railway Company's undertaking.

(vii) *Power of the Government to determine agreement.*—The agreement terminates upon the determination by Government of the South Indian Railway Company's principal contract with the Secretary of State, dated the 24th November 1890, *vide* (vii) under South Indian railway (3′ 3⅜″ gauge).

(viii) *Power of the South Indian Railway Company to determine agreement.*—
(ix) *Power of the Pondicherry Railway Company to determine agreement.*—
} The agreement is terminable by either party on 6 months' notice given expiring on the 31st December in any year, subject to (vii).

(x) *Term of agreement.*—The agreement was originally for a term of 3 years, but it has since been renewed subject only to (vii), (viii) and (ix).

Statistics of working. (Those for the periods prior to 1908 will be found in Appendix 38 to the Railway Administration Report for 1907.)—

Year.	Mileage open at end of each year.	Total capital outlay, including suspense, to end of each year, *i.e.*, outlay on (i) lines open and (ii) lines partly or wholly under construction.	Gross earnings.	Net earnings.	Percentage of net earnings on total capital outlay given in column (3).	Earnings per mile per week.	Proportion of expenses to earnings.
1	2	3	4	5	6	7	8
	Miles.	Rs.	Rs.	Rs.		Rs.	
1908	7·85	5,68,543	77,018	35,880	6·31	189	53·41
1909	7·85	5,68,543	86,073	39,163	6·89	211	54·50
1910	7·85	5,68,543	97,447	43,611	7·67	239	55·25
1911	7·85	5,68,543	1,09,623	54,088	9·50	269	50·71
1912	7·85	5,68,543	1,46,367	70,932	10·93	359	51·54
1st qr. of 1913	7 85	5,68,543	72,699	28,382	4·99	712	60·96
1913-14	7·85	5,68,543	1,56,981	63,016	11·08	385	59·86
1914-15	7·85	5,68,543	1,02,839	41,650	7·33	252	59·50
1915-16	7·85	5,68,543	1,06,176	52,675	9·26	260	50·39
1916-17	7·85	5,68,543	96,434	47,389	8·34	236	50·86
1917-18	7·85	5,68,543	96,111	54,415	9·57	235	43·38

Shoranur-Cochin railway (3′ 3⅜″ gauge)—

The Shoranur-Cochin railway is the property of the Cochin Durbar and was worked by the former Madras Railway Company up to the 31st December 1907. With effect from the 1st January 1908, it was made over to the South Indian Railway Company to be maintained and worked as part of its undertaking.

Progress in opening—

Section of railway.	Date of opening.	Miles.	Total.
1	2	3	4
Shoranur to Ernakulam.	16-7-02	64·75	64·75

Details of construction—

Permanent-way.—The permanent-way consists of 41¼-lb. flat-footed, and a few 50-lb. bull-headed, steel rails laid on wooden sleepers.
Ballast.—The line is ballasted throughout with stone and sand, chiefly the former.
Fencing.—The line is fenced in the vicinity of towns, stations and level crossings.
Curves.—The sharpest curve is of 818·57 feet radius.
Gradients.—The ruling gradient is 1 in 80.

Agreements—

Dated the 1st January 1908, *between His Highness the Raja of Cochin and the South Indian Railway Company*, for maintenance and working.

Dated the 24th May 1915, *between His Highness the Raja of Cochin and the South Indian Railway Company*, as to the adoption of Government financial year for the preparation of accounts.

SOUTH INDIAN RAILWAY SYSTEM—*contd.*

Shoranur-Cochin railway (3′ 3⅜″ gauge)—*concld.*

Main provisions of agreement—

(i) *Land.*—Provided by the Cochin Durbar free of cost.

(ii) *Government aid.*—The railway (which is the property of the Cochin Durbar) is maintained and worked by the South Indian Railway Company in all respects as part of their own undertaking, except only as to the provision of funds for capital expenditure which are provided by the Durbar.

(iii) *Terms of working.*—For maintenance and working the Shoranur-Cochin railway the Durbar pays to the Company in each half-year—

(*a*) All expenditure on renewals, as distinguished from maintenance expenses, incurred on the Durbar's line;

(*b*) the Durbar's railway share of working expenses arrived at by deducting from the total working expenses of the combined system the expenditure incurred on the combined system for renewals as distinguished from maintenance, and dividing the balance between the Company and the Durbar's railway in the proportion that the gross receipts of the latter bear to those of the combined system; and

(*c*) the sum payable under the agreement as rent for the use of the Shoranur Junction station based on the total cost of the Junction station.

(iv) *Distribution of profits.*—Any difference between the gross receipts of the Shoranur-Cochin railway and the payment for working under (iii) which may exceed 2 per cent on the booked capital expenditure of the Durbar's line including land are deemed "surplus profits," divisible between the Durbar and the Company in the proportion of four-fifths to the former and one-fifth to the latter.

(v) *Rates and fares.*—Those generally applicable to the South Indian railway system; *vide* (iv) under South Indian railway (3′ 3⅜″ gauge).

(vi) *Special obligations as to the conveyance of.*—

(*a*) Mails, troops, police, high Government officials, and Government stores.—
(*b*) Government bullion and coin, and the persons in charge thereof.— } As on Indian State railways.

(vii) *Power of the Government to determine agreement.*—The agreement terminates upon the determination by Government of the South Indian Railway Company's principal contract with the Secretary of State, dated the 24th November 1890, *vide* (vii) under South Indian railway (3′ 3⅜″ gauge)

(viii) *Power of the Cochin Durbar to determine agreement.*— } On giving 12 months' notice expiring on
(ix) *Power of the Company to determine agreement.*— } the 30th September or before the 31st March in the succeeding year.

(x) *Term of agreement.*—Subject to (vii), (viii) and (ix).

Statistics of working. (Those for the periods prior to 1908 will be found in Appendix 38 to the Railway Administration Report for 1907).

Year.	Mileage open at end of each year.	Total capital outlay, including suspense, to end of each year, *i.e.*, outlay on (i) lines open and (ii) lines partly or wholly under construction.	Gross earnings.	Net earnings.	Percentage of net earnings on total capital outlay given in column (3).	Earnings per mile per week.	Proportion of expenses to earnings.
1	2	3	4	5	6	7	8
	Miles.	Rs.	Rs.	Rs.		Rs.	
1908 . . .	64·75	69,44,148	4,44,076	2,00,352	2·89	132	54·88
1909 . . .	64·75	69,86,248	5,16,290	2,60,923	3·73	153	49·45
1910 . . .	64·75	69,48,970	5,62,461	2,56,954	3·69	167	54·32
1911 . . .	64·75	69,56,785	6,00,932	2,89,925	4·17	178	51·75
1912 . . .	64·75	69,64,901	6,30,410	3,00,036	4·31	187	52·41
1st qr. of 1913 .	64·75	69,56,035	1,61,124	81,334	1·17	191	49·52
1913-14 . . .	64·75	69,85,278	6,59,639	2,79,356	4·00	196	57·65
1914-15 . . .	64·75	70,15,724	6,68,795	2,73,627	3·90	199	59·09
1915-16 . . .	64·75	70,51,322	7,01,335	3,21,090	4·55	208	54·22
1916-17 . . .	64·75	71,01,011	7,86,177	4,12,268	5 81	233	47·56
1917-18 . . .	64·75	71,08,152	8,87,643	4,92,171	6 92	264	44·55

Tanjore District Board railway (3′ 3⅜″ gauge)—

This railway originally extended from Mayavaram to Mutupet and was constructed by the South Indian Railway Company from funds of which half were provided by the Government of Madras from Provincial resources, and the other half by the Tanjore District Board from its Railway Guarantee Fund which was constituted by enhancing by 3 pies, *i.e.*, from 9 pies to the maximum rate of twelve pies per rupee, the

SOUTH INDIAN RAILWAY SYSTEM—*contd.*

Tanjore District Board railway (3′ 3⅜″ gauge)—*contd.*

Local Land Cess raised in the district. From the 1st January 1900 the property of the Government in the Mayavaram-Mutupet line was made over to the Tanjore District Board at the cost price of Rs. 12,34,720. The construction of the extension from Mutupet to Avadaiyarcoil was then undertaken by the South Indian Railway Company at the cost of the Tanjore District Board from the available balances at the disposal of the Board and further funds raised by debentures, bearing interest at 4 per cent per annum, running for a term of 20 years ending with the 31st December 1920, on the security of the Mayavaram-Mutupet railway and of the receipts from their Railway Guarantee Fund—the Government reserving the right to take over the extension at any time on twelve months' notice by assuming any liabilities undertaken by the Board in the form of debentures to raise the money and repaying any further amounts spent by the Board out of the balances at their disposal.

Progress in opening—

Sections of railway.	Date of opening.	Miles.	Total.	Grand total.	Remarks.
1	2	3	4	5	6
Main line—					
Mayavaram to Tiruvallur	2-4-94	54·08			
Tiruvallur to Mutupet					
Mutupet to Pattukkottai	20-10-02	17·03			
Pattukkottai to Arantangi	31-12-03	28·35			
Arantangi to Quarry	23-8-06	3·90			
			103·36		
Mannargudi extension—					
Nidamangalam to Mannargudi	15-2-15	8·58	8·58		
TOTAL OPEN MILEAGE	...	...	...	111·94	
UNDER CONSTRUCTION OR SANCTIONED FOR CONSTRUCTION—					
Tirnturaipundi to Vedaraniem (sanctioned on 15th October 1912)	...	23·12*			* Opening deferred.
Mayavaram to Tranquebar (sanctioned on 15th December 1915).	...	17·96†	41·08		† Work stopped.
				41·08	
GRAND TOTAL	...	...	...	153·02	

Details of construction—

Permanent-way.—The line is laid with first-class 41¼-lb. flat-footed steel and for a small length only with 40·3-lb. flat-footed second class iron rails on sâl, pynkado, west coast teak and jarrah sleepers.

Ballast.—The Mayavaram-Mutupet section is ballasted with laterite and the Mutupet-Aranangi and Nidamangalam-Mannargudi sections are being ballasted with laterite over sand.

Fencing.—The line is fenced only at stations.

Curves.—The sharpest curve is of 818 feet radius.

Gradients.—The ruling gradient is 1 in 200. Between Adirampatnam and Pattukkottai it is 1 in 160 and between Nidamangalam and Mannargudi, 1 in 400.

Contracts—

Dated the 22nd July 1897, *between the Secretary of State and the South Indian Railway Company*, as to the maintenance and working of the line from Mayavaram to Mutupet.

Government of Madras, Public Works Department, Proceedings No. 402-Ry., dated the 12th March 1900, as to the making over of the line, from Mayavaram to Mutupet, to the Tanjore District Board, and the construction and working, under the terms of the contract of 22nd July 1897, of an extension from Mutupet in the direction of Avadaiyarcoil.

Dated the 7th November 1916, *between the Secretary of State and the South Indian Railway Company*, as to the adoption of the Government financial year for the preparation of accounts.

Main provisions of contract—

(i) *Land.*—Provided by the Government free of cost to the Company.

(ii) *Government aid.*—The railway (which is the property of the Tanjore District Board) was constructed, and is maintained and worked by the South Indian Railway Company, who provide the rolling-stock required for the traffic of the branch line.

(iii) *Terms of working.*—
(iv) *Distribution of profits.*— } The line is maintained and worked at the same percentage of its gross receipts as obtains half-yearly on the South Indian Railway Company's undertaking as a whole, including the Tanjore District Board's line, *plus* the cost of making good any damage affecting the Branch, *plus* 5 per cent of gross receipts for the use of the Company's rolling-stock, *plus* interest on the Company's capital outlay at joint stations provided for in clause 12 of the agreement.

(v) *Rates and fares.*—
(vi) *Special obligations as to the conveyance of.*—
(*a*) Mails, troops, police, high Government officials and Government stores.—
(*b*) Government bullion and coin, and the persons in charge thereof.— } As noted under South Indian railway (3′ 3⅜″ gauge).

(vii) *Power of the Government to determine contract.*—
(viii) *Power of the Company to determine contract.*— } On 12 months' notice expiring on the 31st December in any year.
(ix) *Term of contract.*—As in (vii) and (viii) above.

SOUTH INDIAN RAILWAY SYSTEM—*contd.*

Tanjore District Board railway (3′ 3⅜″ gauge)—*concld.*

Statistics of working (Those for the periods prior to 1900 will be found in Appendix 38 to the Railway Administration Report for 1907.)—

Year.	Mileage open at end of each year.	Total capital outlay, including suspense, to end of each year, *i.e.*, outlay on (i) lines open and (ii) lines partly or wholly under construction.	Gross earnings.	Net earnings.	Percentage of net earnings on total capital outlay given in column (3).	Earnings per mile per week.	Proportion of expenses to earnings.
1	2	3	4	5	6	7	8
	Miles.	Rs.	Rs.	Rs.		Rs.	
1900	54·08	26,50,776	2,32,280	97,782	3·69	83	57·90
1901	54·08	32,17,511	2,90,637	1,35,765	4·22	103	53·29
1902	71·11	38,18,202	3,08,879	1,46,764	3·84	103	52·48
1903	99·46	45,70,190	3,90,747	2,09,167	4·58	106	46·47
1904	99·46	46,32,763	5,24,490	2,61,364	5·64	101	50·17
1905	99·46	47,33,090	5,86,680	2,65,302	5·61	113	54·78
1906	103·36	47,98,375	6,01,066	2,32,833	4·85	116	61·26
1907	103·36	47,86,554	6,33,181	2,86,169	5·98	118	54·80
1908	103·36	48,05,788	6,87,571	2,77,134	5·77	128	59·69
1909	103·36	48,08,937	6,84,734	2,70,086	5·62	127	60·56
1910	103·36	48,45,390	7,59,296	2,96,545	6·12	141	60·94
1911	103·36	48,56,852	8,36,516	3,63,851	7·49	156	56·50
1912	103·36	48,69,026	9,06,508	3,84,660	7·90	169	57·57
1st qr. of 1913	103·36	48,90,882	2,37,084	76,659	1·57	176	67·67
1913-14	103·36	52,09,745	9,79,466	3,49,568	6·71	182	64·31
1914-15	111·94	54,26,680	9,51,392	3,34,830	6·17	163	64·81
1915-16	111·94	60,05,137	10,05,283	4,41,256	7·35	173	56·11
1916-17	111·94	66,24,756	10,19,000	4,35,635	6·58	175	57·25
1917-18	111·94	66,21,113	9,41,252	4,73,127	7·15	162	49·73

Tinnevelly-Quilon (Travancore) railway (British section) (3′ 3⅜″ gauge)—

Progress in opening—

Sections of railway.	Date of opening.	Miles.	Total.
1	2	3	4
Tinnevelly to Kallidaikurichi	1-6-02	19·13	
Kallidaikurichi to the British frontier near Shencottah	1-8-08	31·28	
TOTAL	...	...	50·41

Details of construction—

Permanent-way.—The line is laid with 50-lb. bull-headed steel rails on cast iron pots and 56-lb. flat-footed steel rails on wooden sleepers over bridges.

Ballast.—The line is ballasted throughout with broken stone.

Fencing.—The line is fenced at stations and at a few places where it runs close to villages and public roads.

Curves.—The sharpest curve is of 1,432·5 feet radius.

Gradients.—The ruling gradient is 1 in 100.

Contracts—

Dated the 27th June 1901 (known as the "Travancore contract" and supplemental to the principal contract of 1890) *between the Secretary of State and the South Indian Railway Company*, as to the construction, maintenance and working of the Travancore Branch.

Dated the 21st December 1910 (supplemental to the contracts of 1890 and 1901) *between the Secretary of State and the South Indian Railway Company*, modifying the contract of 1901.

Dated the 23rd April 1914 (supplemental to the contracts of 1890, 1901 and 1910) *between the Secretary of State and the South Indian Railway Company*, as to the adoption of the Government financial year for the preparation of accounts.

Main provisions of contracts—

(i) *Land.*—
(ii) *Government aid.*— } As under South Indian railway (3′ 3⅜″ gauge).

(iii) *Terms of working.*—
(iv) *Distribution of profits.*— } The line is worked by the South Indian Railway Company at the same proportion of its gross earnings of each half-year as obtains on the whole of the Company's undertaking, including the Travancore Branch. The "net revenue receipts" of a half-year so arrived at of the Travancore Branch are then applied, in the following manner and order, in payment to the Government of interest—

(*a*) on debentures and debenture stock, and
(*b*) due on any capital advanced by the Government } for the purpose of the branch;
(*c*) the surplus, if any, is divisible between the Government and the Company in the proportion in which the residue of net receipts of the undertaking is divisible as noted against (iii) (*a*) under South Indian railway (3′ 3⅜″ gauge).

If the net receipts of the Branch fall short of the interest charges, the deficiency is first to be divided between the Native State and British sections of the line in proportion to the capital cost of the sections, and as between the Secretary of State and the Company so much of the deficiency

SOUTH INDIAN RAILWAY SYSTEM—*contd.*

Tinnevelly-Quilon (Travancore) railway (British section) (3′ 3⅜″ gauge)—*concld.*

Main provisions of contract—*concld.*

as is attributable to the Native State section is to be borne by the Secretary of State, and so much as is attributable to the British section is to be borne by the Secretary of State and the Company in the proportion in which any surplus of net receipts over interest charges would have been divisible. The Company's share of any such deficiency may be deducted by the Secretary of State from its share of any surplus profits due under the principal contract for the same half-year or under this contract or the principal contract for the next succeeding half-year.

As between the Government and the Travancore Durbar, the latter has under-written the guarantee of interest to the extent of the capital cost of the portion of the line in its territory; and it has been agreed that any surplus retained by the Government in accordance with the foregoing shall be divided between them in proportion to the respective lengths of the British and Native State sections of the line, and that the share of any deficiency attributable to the latter shall be borne by the Travancore Durbar.

(v) *Rates and fares*—
(vi) *Special obligations as to the conveyance of*.—
(*a*) Mails, troops, police, high Government officials and Government stores.—
(*b*) Government bullion and coin, and the persons in charge thereof.—
(vii) *Services for any Department of the Travancore Durbar*.—
(viii) *Power of the Government to determine contract*.—
(ix) *Power of the Company to surrender contract*.—
(x) *Term of contract*.—

} As under South Indian railway (3′ 3⅜″ gauge).

Statistics of working—

Year.	Mileage open at end of each year.		Total capital outlay, including suspense, to end of each year, *i.e.*, outlay on (i) lines open and (ii) lines partly or wholly under construction.		Gross earnings.	Net earnings	Percentage of net earnings on total capital outlay given in columns (4) and (5).	Interest charges.		Gain or loss *pertaining to each year*.			Earnings per mile per week.	Proportion of expenses to earnings.
										British section.				
	British section.	Native State section.	British section.	Native State section.				British section.	Native State section.	South Indian Railway Company.	State.	Native State section.		
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
	Miles.	Miles.	Rs.	Rs.	Rs.	Rs.		Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	
1902	19·05	...	31,64,655	75,81,838	47,210	26,039	0·24	1,15,306	2,30,014	...	—89,267	—2,30,014	81	44·84
1903	49·50	0·43	38,46,098	1,01,18,508	1,68,379	99,038	0·71	1,21,989	3,14,967	—15,596	—80,817	—2,41,505	101	41·18
1904	50·40	57·98	40,40,486	1,15,88,498	3,05,764	1,49,690	0·96	1,39,945	3,95,455	—16,145	—91,408	—2,78,157	85	51·04
1905	50·48	57·98	43,40,925	1,17,84,078	4,86,757	2,49,307	1·55	1,44,178	3,32,112	—13,234	*+5,038	—2,18,787	86	49·78
1906	50·48	57·98	43,62,235	1,18,26,747	4,97,643	2,22,479	1·37	1,45,163	3,86,240	—13,939	—56,715	—2,38,270	88	55·29
1907	50·48	57·98	43,86,635	1,18,07,091	5,97,098	3,04,860	1·88	1,50,213	3,97,953	—10,269	—54,916	—1,78,121	106	48·94
1908	50·48	57·98	43,89,979	1,17,98,653	6,42,077	2,93,380	1·81	1,51,598	3,99,756	—10,481	—59,438	—1,88,055	114	54·31
1909	50·41	58·05	43,93,309	1,17,97,245	6,50,948	2,95,529	1·83	1,44,338	3,85,580	—9,034	—54,383	—1,70,972	115	54·60
1910	50·41	58·05	44,22,418	1,18,26,000	6,80,080	3,04,658	1·88	1,45,069	3,86,342	—8,351	—52,836	—1,65,556	121	55·29
1911	50·41	58·05	44,40,594	1,18,24,500	7,66,515	3,47,453	2·14	1,49,395	3,99,802	—3,904	—50,747	—1,46,093	136	54·67
1912	50·41	58·05	44,20,640	1,18,18,994	8,15,945	3,85,321	2·37	1,48,147	4,00,801	—3,119	—40,957	—1,19,551	145	52·79
1st qr. of 1913	50·41	58·05	44,19,271	1,18,22,921	1,19,831	73,657	0·45	37,049	1,00,190	—1,191	—16,058	—46,333	136	61·60
1913-14	50·41	58·05	44,19,598	1,18,74,349	9,03,390	3,56,800	2·18	1,18,201	3,31,151	—3,606	—21,821	—68,125	160	60·62
1914-15.	50·41	58·05	43,62,872	1,27,03,573	8,92,082	2,65,752	1·56	1,48,458	4,03,606	—5,561	—67,837	—2,12,914	158	70·21
1915-16.	50·41	58·05	43,52,433	1,45,43,178	9,85,938	4,01,070	2·12	1,53,758	4,15,849	—3,494	—32,181	—1,32,862	175	59·32
1916-17.	50·41	58·05	43,72,052	1,53,72,846	10,27,354	4,18,755	2·12	1,88,565	5,35,782	—6,441	—54,600	—2,44,350	182	59·24
1917-18.	50·41	95·96	43,68,451	1,67,41,762	11,46,203	4,77,362	2·26	2,52,310	6,47,573	—4,878	—2,32,376	—1,85,267	187	58·35

* Due to abnormal increase in net earnings.

Tinnevelly Quilon (Travancore) railway (Native State section) (3′ 3⅜″ gauge)—

Progress in opening—

Sections of railway.	Date of opening.	Miles.	Total.	Grand total.
1	2	3	4	5
Main line.—				
Quilon to Punalur	1-6-04	28·28		
Punalur to the Frontier of the Travancore State near Shencottah	26-11-04	29·77		
			58·05	
Trivandrum extension.—				
Quilon to Trivandrum	1-1-18	37·91	37·91	
GRAND TOTAL.	...	...	...	95·96

SOUTH INDIAN RAILWAY SYSTEM—*contd.*

Tinnevelly-Quilon (Travancore) railway (Native State section) (3′ 3$\frac{3}{5}$″ gauge)—*concl d.*

Details of construction—

Permanent-way.—The main line is laid with 50-lb. bull-headed steel rails on cast iron pot sleepers, except for a length of 23·50 miles, between Punalur and Shencottah, where there are wooden sleepers of jarrah, irool and teak. The extension is laid with 35-lb. flat-footed steel rails on hard wood sleepers.

Ballast.—The main line is ballasted with stone and the extension with gravel.

Fencing.—Only the main line is fenced at stations and at a few places where it runs close to villages and public roads.

Curves.—The sharpest curve is of 477 feet radius.

Gradients.—The ruling gradient between Trivandrum and Punalur is 1 in 100 and between Punalur and Shencottah 1 in 50.

Contracts—

The line is worked on the same terms as apply to the Tinnevelly-Quilon (Travancore) railway (British section).

Statistics of working—

See under British section.

Morappur-Hosur railway (2′ 6″ gauge)—

Progress in opening—

Sections of railway.	Date of opening.	Miles.	Total.
1	2	3	4
Morappur to Dharmapuri	18-1-06	18·53	
Dharmapuri to Hosur	15-5-13	54·87	
TOTAL . . .	...	...	73·40

Details of construction—

Permanent-way.—The permanent-way consists of 30-lb. flat-footed steel rails laid on cross sleepers of pynkado.

Ballast.—The line is ballasted with stone in cuttings and moorum in banks with a stone covering broken to 2″ gauge.

Fencing.—The line is unfenced.

Curves.—The sharpest curve is of 955 feet radius.

Gradients.—The ruling gradient is 1 in 67.

Contracts—

The line is the property of Government. A portion of it, from Morappur to Dharmapuri, was worked on behalf of Government by the former Madras Railway Company up to the 31st December 1907. With effect from the 1st January 1908 it was made over to the South Indian Railway Company for maintenance and working as an integral part of their undertaking under the contracts noted under South Indian railway (3′ 3$\frac{3}{4}$″ gauge).

The other portion, from Dharmapuri to Hosur, was constructed by the agency of the South Indian Railway Company from funds provided by the Secretary of State and as such, no portion of the capital expenditure on this section is debitable to the capital account of the South Indian Railway Company. The capital account is kept separate for the Government of India. This section, however, is worked and maintained by the South Indian Railway Company as part of their undertaking under the contract referred to in the previous paragraph.

Statistics of working. (Those for the periods prior to 1908 will be found in Appedix 38 to the Railway Administration Report for 1907.)—

Year.	Mileage open at end of each year.	Total capital outlay, including suspense, to end of each year, *i.e.*, outlay on (i) lines open and (ii) lines partly or wholly under construction.	Gross earnings.	Net earnings.	Percentage of net earnings on total capital outlay given in column (3).	Earnings per mile per week.	Proportion of expenses to earnings.
1	2	3	4	5	6	7	8
	Miles.	Rs.	Rs.	Rs.		Rs.	
1908	18·53	8,39,999	37,145	3,769	0·45	39	89·85
1909	18·53	9,22,100	39,270	6,883	...	41	117·53
1910 .	18·53	12,56,128	45,796	9,627	0·77	48	78·96
1911 .	18·53	20,37,238	41,315	36	...	43	99·91
1912 .	18·53	25,38,828	48,998	1	0·10	51	94·73
1st qr. of 1913.	18 53	28,75,969	11,918	—2,743	...	49	123·02
1913-14 .	73·40	30,32,268	1,19,789	2,887	0·10	31	97·59
1914-15 .	73·40	30,17,575	1,32,583	—23,737	...	35	117·90
1915-16 .	73·40	30,11,243	1,54,913	7,411	0·25	41	95·22
1916-17 .	73·40	29,90,738	1,71,451	14,600	0·49	45	91·48
1917-18 .	73·40	29,99,582	1,80,454	1,170	0 04	47	99·35

SOUTH INDIAN RAILWAY SYSTEM—*contd.*

Tirupattur-Krishnagiri railway (2′ 6″ gauge)—

Progress in opening—

Section of railway.	Date of opening.	Miles.	Total.
1	2	3	4
Tirupattur to Krishnagiri	18-9-05	25·38	25·38

Details of construction—

Permanent-way.—The permanent-way consists of 30-lb. flat-footed steel rails laid on cross sleepers of Malabar teak.

Ballast.—The line is ballasted with stone in cuttings and moorum in banks with a stone covering broken to 2″ gauge.

Fencing.—The line is unfenced.

Curves.—The sharpest curve is of 955 feet radius.

Gradients.—The ruling gradient is 1 in 67.

Contracts—

The line is the property of Government, on whose behalf it was worked by the former Madras Railway Company up to the 31st December 1907. With effect from the 1st January 1908 it was made over to the South Indian Railway Company for maintenance and working as an integral part of their undertaking under the contracts noted under South Indian railway (3′ 3⅜″ gauge).

Statistics of working. (Those for the periods prior to 1908 will be found in Appendix 38 to the Railway Administration Report for 1907.)—

Year.	Mileage open at end of each year.	Total capital outlay, including suspense, to end of each year, *i.e.*, outlay on (i) lines open and (ii) lines partly or wholly under construction.	Gross earnings.	Net earnings	Percentage of net earnings on total capital outlay given in column (3).	Earnings per mile per week.	Proportion of expenses to earnings.
1	2	3	4	5	6	7	8
	Miles.	Rs.	Rs.	Rs.		Rs.	
1908 .	25·38	10,87,305	53,652	1,233	0·11	41	97·70
1909 .	25·38	10,86,836	45,692	312	0·03	35	99·32
1910 .	25·38	11,14,660	57,179	10,061	0·90	43	82·40
1911 .	25·38	11,01,519	65,298	18,179	1·65	49	72·16
1912 .	25·38	10,98,576	63,563	19,179	1·75	48	69·83
1st qr. of 1913.	25·38	10,98,617	11,825	—1,664	...	36	114·07
1913-14 .	25·38	11,13,720	60,912	—5,583	...	46	109·17
1914-15 .	25·38	11,55,650	65,459	5,139	0·44	50	92·15
1915-16 .	25·38	11,28,324	68,245	16,248	1·44	52	76·19
1916-17 .	25·38	11,02,702	77,787	26,163	2·37	59	66·37
1917-18 .	25·38	10,99,385	92,251	26,306	2·39	70	71·48

Manamadura-Sivaganga railway (3′ 3⅜″ gauge)—

Sanction to the construction of this line by the South Indian Railway Company on behalf of the District Board of Ramnad was conveyed in Railway Board's Notification No. 336, dated the 2nd December 1915, but the commencement of work has been postponed owing to the present abnormal conditions arising out of the war.

Progress in opening—

Section of railway.	Date of opening.	Miles.	Total.
1	2	3	4
Manamadura to Sivaganga (sanctioned on 2nd December 1915)	...	12·43	12·43

SOUTH INDIAN RAILWAY SYSTEM—*concld.*

Tinnevelly-Tiruchendur railway (3′ 3⅜″ gauge)—

Sanction to the construction of this line by the South Indian Railway Company on behalf of the District Board of Tinnevelly was conveyed in Railway Board's Notification No. 211, dated the 16th July 1915. The work which was in progress has for the present been stopped, owing to the abnormal conditions on account of the war.

Progress in opening—

Section of railway.	Date of opening.	Miles.	Total.
1	2	3	4
Tinnevelly to Tiruchendur (sanctioned on 16th July 1915)	...	38·18	38·18

Trichinopoly-Pudukkottai railway (3′ 3⅜″ gauge) —

Sanction to the construction of this line by the South Indian Railway Company on behalf of the Pudukkottai Durbar was conveyed in Railway Board's letter No. 186 P.-16, dated the 4th August 1916, but work has not yet been started.

Progress in opening—

Section of railway.	Date of opening.	Miles.	Total.
1	2	3	4
Trichinopoly to Pudukkottai (sanctioned on 4th August 1916)	..	32·00	32 00

ASSAM-BENGAL RAILWAY SYSTEM.

Chairman.—James Meadows Rendel, Esq.
Managing Director.—Lt.-Col. George Huddleston, C.I.E., V.D.
Offices.—Bishopsgate House, 80, Bishopsgate, London, E. C.
Date of registration of the Company.—18th March 1892.

The construction of the Assam-Bengal railway as a State line was sanctioned in May 1891. The Assam-Bengal Railway Company was formed in England in April 1892 and took over the works commenced by the State. The late Noakhali (Bengal) railway, which was worked by the Assam-Bengal Railway Company up to the end of 1905, was purchased by Government and amalgamated with the Assam-Bengal railway from the 1st January 1906.

Lines comprised in the system—

The Assam-Bengal railway system is made up of—

	Open line.	Under construction, or sanctioned for construction.	Total.
	Miles.	Miles.	Miles.
(*a*) Assam-Bengal railway (3′ 3¾″ gauge)	869·41	...	869·41
(*b*) Mymensingh-Bhairab Bazar railway (3′ 3¾″ gauge)	87·93	13·17	101·10
(*c*) Ckaparmukh-Silghat railway (3′ 3¾″ gauge)	...	50·81	50·81
(*d*) Katakhal-Lalabazar railway (3′ 3¾″ gauge)	...	23·30	23·30
Total	957·34	87·28	1,044·62

Assam-Bengal railway (3′ 3¾″ gauge)—

Progress in opening—

Sections of railway.	Date of opening.	Miles.	Total.	Grand total.	Remarks.
1	2	3	4	5	6
Main line—					
Chittagong Port to Chittagong	3-11-95	1·73			
Chittagong to Feni	1-7-95	55·90			
Feni to Comilla	1-7-95	35·10			
Comilla to Akhaura	1-1-96	29·41			
Akhaura to Karimganj	4-12-96	114·00			
Karimganj to Badarpur	4-12-96	12·00			
Badarpur to Dámchara	23-4-99	*18·53			*Of this 3 miles between Katlichara and Damchara were reconstructed in 1915.
Dámchara to Lumding	1-12-03	†100·29			†Of this, 72½ miles, between Damchara and Langting, were reconstructed in 1915-16 and 1916-17.
Lumding to Nazira	1-1-01	141·87			
Nazira to Lakwá	15-11-01	10·71			
Lakwá to Bhojo	1-2-03	12·72			
Bhojo to Tinsukia	1-3-03	41·53			
			573·79		
Branches—					
Noakhali branch—					
Láksám to Noakhali	15-5-03	30·46			
			30·46		
Chandpur branch—					
Láksám to Chandpur	1-7-95	31·62			
			31·62		
Tangi branch—					
Akhaura to Ashuganj on the left bank of the Megna	1-4-10	19·05			
Ashuganj junction wagon ferry	1-4-15	0·80			
Bhairab Bazar to Daulat Kandi	1-9-16	2 25			
Daulat Kandi to Tangi	1-7-14	39·07			
			61·17		
Sylhet branch—					
Kulaura to Fenchuganj Ghat	16-4-12	15·10			
Fenchuganj Ghat to Kusiyara	1-7-16	0-95			
Kusiyara to Sylhet	1-4-15	15·14			
			31·19		
Silchar branch—					
Badarpur to Katakhal	13-6-98	6·27			
Katakhal to Silchar	8-11-98	12·35			
			18·62		
Gauháti branch—					
Gauháti Ghát to Gauháti	1-1-97	1·32			
Gauháti to Jamunamukh	1-1-97	74·11			
Jamunamukh to Lanka	2-1-99	19·11			
Lanka to Lumding (temporary station)	1-3-99	15·55			
Lumding (temporary station) to Lumding	20-2-00	3·44			
			113·53		
Dikhow Extension—					
Sibsagar Road to Behubar	4-2-13	6·74			
			6·74		
Naginimara extension—					
Bihubar to Naginimara	1-9-17	2·29			
			2·29		
GRAND TOTAL	...	...	...	869·41	

ASSAM-BENGAL RAILWAY SYSTEM—*contd.*

Assam-Bengal railway (3′ 3⅜″ gauge)—*contd.*

Details of construction—

Permanent-way.—The line is laid with 50-lb. flat-footed steel rails, partly on sâl and pynkado, and partly on bastard sâl, nageshur, American and Australian sleepers. The Noakhali and Sylhet branches are laid with 41¼-lb. steel rails on sâl sleepers.

Ballast.—The ballast consists of broken brick, stone and laterite. The whole line has not yet been ballasted.

Fencing.—The line is fenced between Chittagong Port and Silchar, Láksám and Chandpur, Akhaura and Ashuganj, Gauháti Ghât and Gauháti, and half a mile from Gauháti towards Lumding, and at some stations on the hill section. Tangi branch is being fenced.

Curves.—The sharpest permanent curve is of 358 feet radius. Temporary curves up to 20 degrees are in use.

Gradients.—The ruling gradient between Chittagong and Badarpur is 1 in 150; between Badarpur and Lumding, 1 in 60, with a 1 in 37 banking section, 8·54 miles long; between Gauháti and Tinsukia, and Kulaura and Sylhet, 1 in 100; between Láksám and Noakhali, 1 in 200; between Láksám and Chandpur, 1 in 300; between Badarpur and Silchar, 1 in 150; and between Akhaura and Tangi, 1 in 200.

Contracts—

Dated the 26th April 1892 (called the principal contract), *between the Secretary of State and the Assam-Bengal Railway Company*, as to the construction, management, maintenance and working, by the Company, of their undertaking.

Dated the 12th April 1897 (supplemental to the contract of 1892), *between the Secretary of State and the Assam-Bengal Railway Company*, as to the raising of £300,000 by means of debentures.

Dated the 6th December 1899, *between the Secretary of State and the Assam-Bengal Railway Company*, as to the extension of time for the completion of the railway.

Dated the 4th November 1902, *between the Secretary of State and the Assam-Bengal Railway Company*, relating to the renewal of debentures issued by the Company.

Dated the 29th April 1903 (supplemental to the contract of 1892), *between the Secretary of State and the Assam-Bengal Railway Company*, as to the adoption of 1*s.* 4*d.* per rupee as the "prescribed" rate of exchange.

Dated the 11th April 1906 (supplemental to the contract of 1892), *between the Secretary of State and the Assam-Bengal Railway Company*, as to the acquisition by the Company of the Noakhali (Bengal) railway for the purpose, and as a part, of their undertaking as from 1st January 1906.

Dated the 5th March 1914 (supplemental to the contract of 1892), *between the Secretary of State and the Assam-Bengal Railway Company*, as to the adoption of the Government financial year for the purposes of accounts.

Main provisions of contracts—

(i) *Land.*—Provided by the Government free of cost to the Company.

(ii) *Government aid.*—Government guarantee interest in sterling at 3 per cent on the Company's share capital of £ 1,500,000. (Up to 30th June 1898 interest was allowed at 3½ per cent.)

(iii) *Distribution of profits.*—The net earnings to be applied in payment to the Government of—

(*a*) The equivalent in rupees of interest paid on debenture capital; provided that, if the Company's share capital is not less than $\frac{3}{11}$ths of the total capital expenditure, the rate of interest recovered under this sub-head (on debentures issued previous to 30th June 1898) shall not exceed the rate for the time being applicable to the Company's share capital;

(*b*) the equivalent in rupees of the guaranteed interest paid to the Company in respect of share capital; and

(*c*) interest on the capital contributed, or deemed to be contributed, by the Government, at the same rate as the guarantee for the time being on the Company's capital. But if the capital advanced by Government exceed $\frac{8}{11}$ths of the total capital expenditure for the time being, the rate of interest on the amount of the excess to be subject to agreement.

"Surplus profits", after interest charges have been met, are divided between the Company and the Government in the ratio of the respective amounts of capital expended by them on the undertaking.

(iv) *Rates and fares.*—To be approved by the Government.

(v) *Special obligations as to the conveyance of—*

(*a*) Mails, troops, police, high Government officials and Government stores.—To be conveyed on the same general conditions as obtain on State railways of the same gauge, and at rates to be approved by the Government.

(*b*) Government bullion and coin, and the persons in charge thereof.—To be conveyed at special rates to be approved by the Government.

(vi) *Power of the Government to determine contract.*—The railway and its appurtenances are absolutely the property of the Government, who may determine the contract on the 31st December 1921, or at the end of any succeeding tenth year by giving 12 months' previous notice.

ASSAM-BENGAL RAILWAY SYSTEM—*contd.*

Assam-Bengal railway (5′ 3⅜″ gauge)—*concld.*

Main provisions of contracts—*concld.*

The Government may also determine the contract at any time on six months' previous notice if the Company fail to fulfil its obligations, or if the line be worked at a loss for three consecutive half-years. On the determination of the contract, the Company is to hand over to the Government the railway and all its belongings of every description, on repayment by the Government of the amount in sterling, at the par value, of the share capital paid by the Company to the Government, and of any existing liabilities, including debentures incurred with the sanction of the Secretary of State.

(vii) *Power of the Company to surrender contract.*—Nil.

(viii) *Term of contract.*—Not specified.

Statistics of working—

Year.	Mileage open at end of each year.	Total capital outlay, including suspense, to end of each year, i.e., outlay on (i) lines open, and (ii) lines partly or wholly under construction.	Gross earnings.	Net earnings.	Percentage of net earnings on total capital outlay given in column (3).	Interest.	Gain or loss to the State *pertaining to each year.*	Earnings per mile per week.	Proportion of expenses to earnings.	Remarks.
1	2	3	4	5	6	7	8	9	10	11
	Miles.	Rs.	Rs.	Rs.		Rs.	Rs.	Rs.		
1895 .	129·49	4,27,47,293	2,14,426	—8,047	...	13,95,636	—14,03,683	64	103·75	* The decrease in net earnings is due to heavy expenditure of an extraordinary character, *e.g.*, heavier renewals of sleepers, repairs to jetty sheds destroyed by fire in 1907 and commission on debentures renewed in 1908.
1896 .	285·90	5,59,03,217	6,18,785	33,238	0·06	23,73,034	—23,39,796	71	94·63	
1897 .	360·63	6,94,23,486	9,90,640	72,214	0·10	22,56,279	—21,84,065	63	92·71	
1898 .	379·25	8,32,11,758	13,08,124	54,551	0·07	24,45,275	—23,90,724	83	95·83	
1899 .	434·66	19,45,26,273	16,19,646	3,22,704	0·37	28,63,084	—25,40,380	75	80·08	
1900 .	436·26	10,31,71,809	17,09,955	3,64,364	0·38	33,31,390	—29,67,026	75	78·69	
1901 .	589·21	11,17,19,504	21,34,252	4,56,654	0·44	35,06,252	—30,49,598	70	78·60	
1902 .	589·21	11,87,04,959	20,96,058	2,54,418	0·23	38,08,387	—35,53,969	68	87·86	
1903 .	740·38	12,40,28,548	23,97,658	4,43,963	0·35	40,71,450	—36,27,487	71	81·48	
1904 .	740·38	12,60,09,639	20,53,962	1,05,390	0·08	41,66,535	—40,61,145	77	96·43	
1905 .	740·38	12,78,56,722	34,14,295	1,25,615	0·10	42,61,306	—41,35,691	88	96·32	
1906 .	775·28	13,25,20,704	42,20,064	4,27,858	0·30	44,58,682	—40,25,824	104	89·86	
1907 .	775·28	13,49,01,242	48,90,137	6,40,254	0·47	37,92,277	—31,52,023	122	86·91	
1908 .	775·28	13,90,59,050	46,96,729	* 53,309	0·04	41,64,794	—41,11,485	117	98·87	
1909 .	770·84	14,31,45,488	49,14,895	4,47,461	0·31	43,64,911	—39,17,450	122	90·90	
1910 .	789·89	14,45,68,076	51,70,052	7,84,033	0·54	44,08,319	—36,24,286	126	84·83	
1911 .	789·89	14,79,47,899	55,76,145	11,37,710	0·77	45,86,405	—34,48,695	136	79·59	
1912 .	804·99	15,04,29,093	64,50,146	17,29,637	1·15	46,70,106	—29,40,469	155	73·18	† Decrease in the mileage is due to the exclusion, of the hill section under reconstruction,
1st qr. of 1913.	804·99	15,18,32,951	18,68,616	5,96,938	0·39	11,75,440	—5,78,502	173	66·99	
1913-14 .	811·73	15,70,22,687	70,42,793	22,71,129	1·45	49,09,954	—26,38,825	167	67·75	
1914-15 .	847·98	16,24,35,227	68,85,473	17,31,408	1·07	51,33,336	—34,01,928	156	74·85	
1915-16 .	†807·92	16,49,71,133	67,47,378	14,90,502	0·90	52,48,999	—37,58,497	161	77 91	
1916-17 .	823·12	16,66,64,680	67,38,485	14,79,329	0·89	51,39,317	—36,59,988	157	78·04	
1917-18 .	869·41	16,89,41,111	72,66,661	18,22,922	1·08	54,65,160	—36,42,238	159	75·25	

Mymensingh-Bhairab Bazar railway (3′ 3⅜″ gauge)—

Date of registration of the Company—1915.

Sanction to the construction of this line was conveyed in Railway Board's Notification No. 115, dated the 5th May 1915. The line is being constructed by the Mymensingh-Bhairab Bazar Railway Company.

Progress in opening—

Sections of railway.	Date of opening.	Miles.	Total.	Grand total
1	2	3	4	5
Bhairab Bazar to Kishorganj	20-3-17	31·25		
Kishorganj to Gourigram Junction	1-9-17	30·21		
Mymensingh, *vid* Gauripram and Shamgunj Junctions, to Netrakona	16-7-17	26·47		
Total open mileage ...			87.93	
Under construction or sanctioned for construction—				
Shamganj to Jaria Jhanjail (sanctioned on 5th May 1915) . . .	...	13·17	13·17	
GRAND TOTAL .	...	...	...	101·10

ASSAM-BENGAL RAILWAY SYSTEM—*concld.*

Mymensingh-Bhairab Bazar railway (3′ 3⅜″ gauge)—*concld.*

Details of construction—

Permanent-way.—The permanent-way consists of 50-lb. steel rails, partly of Assam-Bengal railway type and partly of British standard section, laid on sâl sleepers.

Ballast.—The line has not been balasted yet.

Fencing.—Only station yards, level crossings and selected portions of the line are to be fenced.

Curves.—The sharpest curve has a radius of 1,146 feet.

Gradients.—The ruling gradient is 1 in 200 on approaches to bridges with headways for navigation.

Contract.

The line is owned by the Mymensingh-Bhairab Bazar Railway Company by whom it is being constructed. The open portion is being worked by the Assam-Bengal Railway Company under the terms of a contract which is under consideration

Statistics of working—

Year.	Mileage open at end of the year.	Total capital outlay, including suspense, to end of the year, *i.e.*, outlay on (*i*) lines open and (*ii*) lines partly or wholly under construction.	Gross earnings.	Net earnings.	Percentage of net earnings on total capital outlay given in column (3).	Rebate from, (+), or share of surplus profits payable to (−), the Government.	Total income.	Percentage of total income on total capital outlay given in column (3).	Earnings per mile per week.	Proportion of expenses to earnings.
1	2	3	4	5	6	7	8	9	10	11
	Miles.	Rs.	Rs.	Rs.			Rs.		Rs.	
1917-18 .	87·93	99,22,534	3,10,466	1,55,233	1·56	...	1,55,233	1·56	68	50·00

Chaparmukh-Silghat railway (3′ 3⅜″ gauge)—

Date of registration of the Company—1915.

Sanction to the constructian of this line by the Assam-Bengal Railway Company, on behalf of the Chaparmukh-Silghat Railway Company was conveyed in Railway Board's Notification No. 276, dated the 5th October 1915.

Progress in opening—

Section of railway.	Date of opening.	Miles.	Total.
1	2	3	4
Chaparmukh to Silghat (sanctioned on 5th October 1915)	...	50·81	50·81

Katakhal-Lalabazar railway (3′ 3⅜″ gauge)—

Date of registration of the Company—1915.

Sanction to the construction of this line by the Assam-Bengal Railway Company, on behalf of the Katakhal-Lalabazar Railway Company was conveyed in Railway Board's Notification No. 451-P., dated the 9th March 1916.

Progress in opening—

Section of railway.	Date of opening.	Miles.	Total.
1	2	3	4
Katakha to Lalabazar (sanctioned on 9th March 1916)	...	23·30	23·30

BENGAL AND NORTH-WESTERN RAILWAY SYSTEM.

Chairman.—Alexander Izat, Esq., C.I.E.
Managing Director.—E. A. Neville, Esq.
Offices.—237, Gresham House, Old Broad Street, London, E.C.
Date of registration of the Company.—23rd October 1882.

Lines comprised in the system.—The Bengal and North-Western railway system is made up of—

	Miles.
(*a*) Bengal and North-Western railway (3′ 3⅜″ gauge)	1,241·65
(*b*) Tirhoot railway (3′ 3⅜″ gauge)	804·00
Total	2,045·65

Running powers—

		Miles.
Home line over Foreign lines—		
Cawnpore to Aishbagh, Cawnpore-Burhwal (3′ 3⅜″ gauge) link, Oudh and Rohilkhand railway	for passenger and goods trains.	45·03
Aishbagh to Daliganj, Lucknow-Bareilly (3′ 3⅜″ gauge) railway		3·40
Daliganj to Burhwal, Cawnpore-Burhwal (3′ 3⅜″ gauge) link, Oudh and Rohilkhand railway		34·57
Benares Cantonment to Benares City, and Benares Cantonment to outer signal on the Benares-Allahabad extension, Oudh and Rohilkhand railway (3′ 3⅜″ gauge)		2·18
At Sitapur within the boundary of the Rohilkund and Kumaon railway		0·85
Total ...		86·03

Bengal and North-Western railway (3′ 3⅜″ gauge)—

Progress in opening—

Sections of railway.	Date of opening.	Miles.	Total.	Grand total.
1	2	3	4	5
Main line—				
Sonepore, *vid* Chupra, Savan and Gorakhpur, to Mankapur	15-1-85	221·44		
Mankapur to Gonda	2-4-84	17·36		
Gonda to Colonelganj	29-10-91	17·89		
Colonelganj to Jarwal Road	1-2-92	10·74		
Jarwal Road to Gogra Ghât	18-12-96	2·78		
Gogra Ghât to Chowka Ghât	24-12-98	3·67		
Chowka Ghât to Burhwal	24-11-96	2·88		
			276·76	
Branches and Extensions—				
Digha Ghât branch—				
Sonepore to Palezaghat	15-1-85	6 10		
			6·10	
Mashrak branch—				
Chupra to Mashrak	20-3-10	26·17		
			26·17	
Maharajganj branch—				
Daronda to Maharajganj	1-4-07	3·90		
			3·90	
Savan—Captainganj branch—				
Savan to Thawe	1-4-07	17·82		
Thawe to Tamkuhi Road	15-3-13	22·60		
Tamkuhi Road to Captainganj	26-4-13	38·86		
			79·28	
Bagaha branch—				
Gorakhpur to Chhitauni Ghât	7-2-07	59·88		
Chhitauni Ghât to Bagaha	9-8-12	2·38		
			62·26	
Gorakhpur-Gonda loop—				
Gorakhpur to Uska Bazar	15-12-86	39·66		
Uska Bazar to Barhni	15-1-05	20·88		
Barhni to Tulsipur	15-1-06	24·04		
Tulsipur to Balrámpur	1-6-98	18·15		
Balrámpur to Gonda	15-12-96	23·08		
			135·81	
Jarwa branch—				
Gainsari to Jarwa	12-4-06	9·16		
			9·16	
Ajodhya branch—				
Mankapur to Nawabganj (Gonda)	2-4-84	13·48		
Nawabganj (Gonda) to Ajodhya (Lakarmandi Ghat)	1-12-84	5·05		
			18·53	
Naipalganj Road branch—				
Gonda to Bahraich	2-4-84	37 47		
Bahraich to Naipálganj Road	15-12-86	33·15		
			70·62	
Katarnian Ghât branch—				
Nánpára to Mihinpurwa	15-12-96	14·79		
Mihinpurwa to Katarnian Ghât	25-3-98	27·28		
			42·07	
Sitapur branch—				
Burhwal to Sitapur	13-3-11	58·91	58·91	
Carried over	...	...	...	789·57

BENGAL AND NORTH-WESTERN RAILWAY SYSTEM—*contd.*

Bengal and North-Western railway (3′ 3⅜″ gauge)—*contd.*

Progress in opening—*concld.*

Sections of railway.	Date of opening.	Miles.	Total.	Grand total.
1	2	3	4	5
Brought forward	...	...	...	789·57
Chupra-Benares-Allahabad branch—				
Chupra to Revelganj	15-4-91	7·75		
Revelganj to Manjhi	1-4-99	1·34		
Manjhi to Bakulha	4-2-12	4·57		
Bakulha to Ballia	12-5-99	26·85		
Ballia to Phephna	15-3-99	6·26		
Phephna to Ghazipur Ghât	10-3-03	32·02		
Ghazipur Ghât to Aunrihar (Ganges-Gogra Doab lines)	15-3-99	26·88		
Aunrihar to Benares	15-3-99	19·87		
Benares to Madhosingh	1-3-09	28·60		
Madhosingh to Jhusi	21-4-09	41·95		
Jhusi to Izat bridge	1-11-12	2·36		
Izat bridge to Allahabad City	8-5-13	2·29		
			200·76	
Mirzapur Ghât extension—				
Madhosingh to Mirzapur Ghât (Ganges-Gogra Doab lines)	1-3-09	6·89		
Mirzapur Ghât to Chilh (Ganges-Gogra Doab lines)	25-10-12	0·67		
			7·56	
Bhatni-Benares chord—				
Bhatni to Turtipar	15-12-96	17·23		
Turtipar to Mau (Ganges-Gogra Doab lines)	8-6-98	26·00		
Mau to Aunrihar (Ganges-Gogra Doab lines)	15-3-99	35·81		
			79·04	
Barhaj branch—				
Salimpur to Barhaj	1-12-97	13·09		
			13·09	
Dohrighat branch—				
Phephna to Indara (Ganges-Gogra Doab lines)	15-3-99	31·39		
Indara to Dohrighat (Ganges-Gogra Doab lines)	21-3-04	21·92		
			53·31	
Shahganj branch—				
Mau to Azamgarh (Ganges-Gogra Doab lines)	8-6-98	26·83		
Azamgarh to Shahganj (Ganges-Gogra Doab lines)	14-2-03	34·95		
			61·78	
Jaunpur branch—				
Aunrihar to Jaunpur (Ganges-Gogra Doab lines)	21-3-04	36·54		
			36·54	
				452·08
TOTAL	...	...	...	1,241·65

Details of construction—

Permanent-way.—The main line, the Sitapur branch and the sections from Chupra to Inchcape bridge and Bhatni to Turtipar are laid with 50-lb. steel rails mostly on sâl sleepers. The rest of the line north of the Gogra is laid with 41¼-lb. steel rails mostly on sâl sleepers. The Ganges-Gogra Doab main lines from Turtipar to Allahabad City and Aunrihar to Inchcape bridge are laid with 50-lb. steel rails on sâl sleepers, and the branches with 41¼-lb. steel rails on sâl sleepers.

Ballast.—The whole line, except quite new constructions, is ballasted with kunkur, broken brick or shingle.

Fencing.—The main line and the section from Chupra to Revelganj are fenced.

Curves.—The sharpest curve is of 900 feet radius on the Gorakhpur division.

Gradients.—The ruling gradient is 1 in 300. On the various river ghât lines the gradients are steeper.

Contracts—

Dated the 12th December 1882 (called the original contract), *between the Secretary of State and the Bengal and North-Western Railway Company*, as to the construction and working by the Company of the Bengal and North-Western railway.

Dated the 22nd February 1886 (supplemental to and modifying in some respects the contract of 1882), *between the Secretary of State and the Bengal and North-Western Railway Company.*

Dated the 18th July 1890, *between the Secretary of State and the Bengal and North-Western Railway Company*, as to the taking over and working by the Company of the State railways known as the Tirhoot railway in conjunction with the Company's railway.

BENGAL AND NORTH-WESTERN RAILWAY SYSTEM—*contd.*

Bengal and North-Western railway (3′ 3⅜″ gauge)—*contd.*

Contracts—*concld.*

Dated the 19th December 1894 (supplemental to the contracts of 1882, 1886 and 1890), *between the Secretary of State and the Bengal and North-Western Railway Company*, providing for the further extension of the Company's system of railways and for the exercise by the Company of running powers for through traffic over the Cawnpore-Burhwal (3′ 3⅜″ gauge) link of the Oudh and Rohilkhand railway.

Dated the 12th December 1895 (supplemental to the contracts of 1890 and 1894), *between the Secretary of State and the Bengal and North-Western Railway Company*, modifying in some respects the contract of 1890 relating to the Tirhoot railway.

Dated the 23rd July 1896 (supplemental to the contracts of 1882, 1886, 1890, 1894 and 1895), *between the Secretary of State and the Bengal and North-Western Railway Company*, providing for further extensions of the Company's railway and of the Tirhoot railway.

Dated the 15th January 1903 (supplemental to the contracts of 1882, 1886, 1894 and 1896), *between the Secretary of State and the Bengal and North-Western Railway Company*, providing for further extensions of the Company's railway.

Dated the 24th April 1903 (supplemental to the contracts of 1882, 1890 and 1895), *between the Secretary of State and the Bengal and North-Western Railway Company*, as to the adoption of 1*s.* 4*d.* per rupee as the "prescribed" rate of exchange.

Dated the 14th December 1905 (supplemental to the contracts of 1882, 1890, 1895, 1896 and 1903), *between the Secretary of State and the Bengal and North-Western Railway Company*, continuing with modifications the contract of 1890 relating to the Tirhoot railway and modifying in some respects the contract of 1882 relating to the Company's railway.

Dated the 7th October 1907 (supplemental to the contracts of 1882, 1886, 1890, 1894, 1895, 1896, 15th January and 24th April 1903, and 1905), *between the Secretary of State and the Bengal and North-Western Railway Company*, providing for further extensions of the Company's railway.

Dated the 1st October 1908 (supplemental to the contracts of 1882, 1886, 1890, 1894, 1895, 1896, 15th January and 24th April 1903, 1905 and 1907), *between the Secretary of State and the Bengal and North-Western Railway Company*, for providing for a further extension of the Company's railway from Chupra to Mashrak.

Dated the 9th July 1909 (supplemental to the contracts of 1882, 1886, 1890, 1894, 1895, 1896, 15th January and 24th April 1903, 1905, 1907 and 1908), *between the Secretary of State and the Bengal and North-Western Railway Company*, providing for a further extension of the Company's railway, from Burhwal to Sitapur.

Dated the 13th October 1910 (supplemental to the contracts of 1882, 1886, 1890, 1894, 1895, 1896, 15th January and 24th April 1903, 1905, 1907, 1908 and 1909), *between the Secretary of State and the Bengal and North-Western Railway Company*, providing for extensions of the Company's railway connecting the Company's Main lines with the Company's Doab lines and with the Tirhoot railway, respectively, by bridges over the Gogra and Gundak rivers.

Dated the 7th December 1910 (supplemental to the contracts of 1882, 1886, 1890, 1894, 1895, 1896, 15th January and 24th April 1903, 1905, 1907, 1908, 1909 and 13th October 1910), *between the Secretary of State and the Bengal and North-Western Railway Company*, providing for a further extension of the Company's railway from Thawe to Captainganj.

Dated the 13th March 1914 (supplemental to the contracts of 1882, 1886, 1890, 1894, 1895, 1896, 15th January and 24th April 1903, 1905, 1907, 1908, 1909, 13th October and 7th December 1910), *between the Secretary of State and the Bengal and North-Western Railway Company*, providing for the accounts for purposes of these contracts being prepared from 1st April 1913 for the financial year instead of for the calendar year.

Bengal and North-Western Railway Company's Act of 1914, authorising the formation of a "Capital Redemption Fund" out of the general revenues of the Company; the sums at credit of this fund to be utilised in purchasing and cancelling the Company's first or second preference stock.

Main provisions of contracts—

(i) *Land.*—Provided by the Government free of cost for the Company's railway; and at the cost of capital for the Tirhoot railway undertaking.

(ii) *Government aid.*—Nil.

(iii) *Terms of working.*—The Company's railway and the Tirhoot railway undertaking are worked conjointly; but the accounts of each are kept separate and distinct, except those relating to working expenses, other than maintenance, Abstract A.

BENGAL AND NORTH-WESTERN RAILWAY SYSTEM—*contd.*

Bengal and North-Western railway (3′ 3⅜″ gauge)—*contd.*

Main provisions of contracts—*contd.*

In addition to the ordinary working expenses and usual contributions to the State Railway and Company's Provident Institutions, the working expenses for each half-year include interest at 4 per cent per annum on all outlay up to the 31st December 1904 expended on "rolling-stock," "steamers and barges and landing stages," "stores," and "stations and offices, station machinery, staff quarters and all other works including permanent-way at Sonepore" for joint use, and on all outlay subsequent to that date up to the close of each half-year incurred on the same matters and on "workshops and store buildings, etc." or any other works used for joint purposes. The interest so charged is to be credited to the respective revenue accounts of the Company's railway and the Tirhoot railway undertaking in the ratio of the contributions of capital made to the joint accounts by each.

The working expenses of the open system, exclusive of the charges for maintenance of way works and stations, other than those for general supervision, are divided between the Company's railway and the Tirhoot railway undertaking in proportion to their respective gross earnings.

The charges for maintenance of way, works and stations, other than the charges for general supervision are appropriated and allotted to the Company's railway or the undertaking on the basis of the actual expenditure incurred by each.

(iv) *Distribution of profits.*—As to the Company's railway, under the original contract of 1882 any surplus over 6 per cent was to be equally divided between the Government and the Company; but this provision was rescinded by the contract of the 22nd February 1886, which leaves the profits entirely in the hands of the Company.

As to the open system, after deducting half-yearly from the gross earnings of the Company's railway and of the undertaking, respectively, the working expenses noted under (iii), the balance of the gross earnings (termed net revenue) in the case of the Company's line belongs to the Company, and in the case of the Tirhoot railway undertaking is applied in the following manner and order:—

(*a*) in payment to the Company of interest accruing in each half-year, after the expiration of the period during which interest is chargeable to capital, at 4 per cent per annum on one half of the capital raised and expended by the Company for the purposes of the railway crossing the Gundak river by a bridge, from Bagaha to Chhitauni, including interest paid out of capital during construction;

(*b*) in payment to the Government from the aggregate net revenue for the entire year of interest accruing in such year at 5 per cent per annum on all money advanced or expended by the Government for the purposes of the open lines of the undertaking which have not been repaid to the Government;

(*c*) the residue if not in excess of 10 lakhs going to Government and the Company in the proportion of $\frac{4}{5}$ths to the former and $\frac{1}{5}$th to the latter; if in excess of 10 lakhs, then as to 10 lakhs in the aforesaid proportion and as to the balance in the proportion of $\frac{14}{15}$ths to the Government and $\frac{1}{15}$th to the Company.

The difference between the net revenue of the Company's railway belonging and payable to the Company and the aggregate advances made to the Company, in any half-year, is to be adjusted as soon as known by payments in India between the Government and the Company as the case may require.

(v) *Rates and fares.*—As to the Company's line—to be approved by the Government, who may require the charge for salt, coal and food grains for full-wagon loads carried not less than 100 miles to be reduced to any rate not below $\frac{1}{8}$th pie per maund per mile and for passengers not below 2 pies per mile.

As to the open system—for the carriage of through passengers and goods over the Company's railway, of all through and local passengers and goods over the Tirhoot railway undertaking, and of all passengers and goods from and to the undertaking or any connected railway carried over the Company's railway or any foreign railway connected therewith, the Government have the power to fix and vary the classification for passengers and goods and the maxima and minima fares and rates for the several classes of passengers and goods, respectively. Until otherwise fixed no rate for goods is to be higher than one pie or lower than $\frac{1}{16}$th pie per maund per mile.

BENGAL AND NORTH-WESTERN RAILWAY SYSTEM—*contd.*

Bengal and North-Western railway (3′ 3⅜″ gauge)—*contd.*

Main provisions of contracts—*concld.*

(vi) *Special obligations as to the conveyance of.*—

(*a*) Mails and post office servants on duty.—To be carried free on the Company's railway ; and on the Tirhoot railway on the same general conditions and at the same rates as may be in force on the 3′ 3⅜″ gauge State railways.

(*b*) Troops, police, high Government officials and Government stores.—As to the Company's railway, to be conveyed on the same general conditions as those in force on the 3′ 3⅜″ gauge State railways, and at rates to be approved by the Government. As to the Tirhoot railway undertaking, to be conveyed on the same general conditions and at the same rates as may be in force on State railways of the 3′ 3⅜″ gauge.

(*c*) Government bullion and coin, and the persons in charge thereof.—To be conveyed at special rates approved from time to time by the Secretary of State.

(vii) *Power of the Government to determine the contracts relating to the Company's railway.*—The line and all its appurtenances become the property of Government on the termination of the contracts. If the contracts terminate by the efflux of time the Government is to pay to the Company the value of rolling-stock, movable machinery, stores, etc. The Government may determine the contract after 50 years (*i.e.*, on the 31st December 1932), on one year's previous notice of intention to purchase, paying 25 times the average yearly net earnings, less the share of surplus profits belonging to the Government on the assumption that section 39 (5) of the contract of 1882 had been in actual operation for the five years immediately preceding the *purchase*. And at any time prior to the 31st December 1912, the Government have the right and option to elect that, upon the determination of the contract of 1882 by notice of purchase on the 31st December 1932, they will in lieu of making the aforesaid payment, pay to the Company a sum of money equal to 25 times the average yearly net earnings, less the share of surplus profits belonging to the Government during the five years immediately preceding the *31st December 1912*, on the assumption that section 39 (5) of the contract of 1882 had been in actual operation during the same five years. These terms do not apply to the Doab lines referred to in the contracts of 1896, 1907 and 1910, in respect of which the Government undertake to pay to the Company, in the event of purchase, a sum equal to the capital raised and expended thereon with their sanction, including interest paid out of capital during construction. One-half of the capital raised and expended by the Company for the Manjhi Ghat-Bakulha section, including interest paid out of capital during construction, is to be treated as capital attributable to the Doab lines; the other half, and the whole of the capital for the Bagaha-Chhitauni section, including interest paid out of capital during construction, is to be treated as capital attributable to the Company's main lines. The Government may also determine the contract at any time, at six months' notice, if the Company fail to observe its obligations, on paying the value of rolling-stock, stores, etc., and fair value of the line, less the value of the same treated as a reversionary sum absolutely payable on the 31st December 1981.

(viii) *Power of the Government to determine the contracts relating to the Tirhoot railway undertaking.*—If the original contract with the Company, dated the 12th December 1882, terminate for any reason prior to the expiry of the term of the contracts relating to the Tirhoot railway undertaking, then the latter also, *ipso facto*, terminate at the same time. The Government may also terminate the Tirhoot railway contracts at any time, on 6 months' notice, if the Company fail to observe its obligations. The Government may also terminate the Tirhoot railway contracts on the 31st December 1919*, on 6 months' notice: or, at the same date and by the like notice, the Government may modify or alter the terms with the approval of the Company as from the 31st December 1919*; but if the Company do not agree to the proposed modifications or alterations then the contracts will terminate on the 31st December 1919*. On the determination of the Tirhoot railway contracts the Government will resume possession of the undertaking, and any capital sums which may have been raised by the Government and expended on the Company's lines, or raised and expended by the Company on the undertaking, are to be considered as debts due from the Company and the Government respectively.

* Since extended to 1932, *vide* Despatch No. 76-Railway, dated the 3rd July 1914, from the Secretary of State.

(ix) *Power of the Company to surrender contracts.*—Nil.

(x) *Term of contracts relating to the Company's railway.*—99 years, *i.e.*, until the 31st December 1981, subject to (vii).

(xi) *Term of contracts relating to the Tirhoot railway undertaking*—28 years, *i.e.*, from 1st January 1905 to the 31st December 1932, subject to (viii).

BENGAL AND NORTH-WESTERN RAILWAY SYSTEM—*contd.*

Bengal and North-Western railway (3′ 3⅜″ gauge)—*concld.*

Statistics of working—

Year.	Mileage open at end of each year.	Total capital outlay, including suspense, to end of each year, *i.e.*, outlay on (i) lines open and (ii) lines partly or wholly under construction.	Gross earnings.	Net earnings.	Interest divided between the Government and the company in the ratio of gross earnings.	Payments received for working the Tirhoot railway.	Totol income.	Percentage of total income on total capital outlay given in column (3).	Earnings per mile per week.	Proportion of expenses to earnings.
1	2	3	4	5	6	7	8	9	10	11
	Miles.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.		Rs.	
1884	75·00	1,52,47,423	77,670	—26,221	...	...	—26,221	...	29	133·76
1885	303·00	2,01,86,980	12,05,541	5,89,206	...	...	5,89,206	2·92	72	51·13
1886	376·00	2,32,16,102	18,54,074	8,09,189	...	...	8,09,189	3·49	106	56·36
1887	376·00	2,56,22,684	19,44,002	8,37,004	...	...	8,37,004	3·27	90	56·94
1888	376·00	2,61,51,593	22,09,543	9,88,844	...	...	9,88,844	3·78	102	55·25
1889	376·00	2,63,41,872	22,11,824	10,53,964	...	...	10,53,964	4·00	103	52·35
1890	376·00	2,68,84,918	22,08,788	12,21,020	...	*24,245	12,45,265	4·63	101	44·72
1891	401·00	2,76,68,842	24,76,909	15,48,590 16,20,567	..	69,484	16,18,074	5·85	111	37·48
1892	414·50	2,83,88,821	29,39,077	15,75,636	...	67,060	16,87,627	5·94	125	44·86
1893	414·50	2,84,84,234	26,14,546	16,87,899	...	66,842	16,42,478	5·79	114	39·74
1894	414·50	2,87,24,887	26,17,242	16,82,766	...	72,358	17,60,257	6·13	115	35·51
1895	414·50	3,12,95,704	25,71,036		...	72,909	17,55,675	5·61	112	34·55
1896	478·63	3,43,36,114	26,26,033	16,70,172	...	71,614	17,41,786	5·07	113	36·40
1897	485·55	4,10,32,207	27,55,718	17,24,277	...	74,905	17,99,182	4·38	105	37·43
1898	586·25	4,66,78,822	33,31,890	19,74,920	...	75,885	20,50,805	4·39	112	40·73
1899	743·00	5,16,06,763	43,44,861	26,70,911	...	61,940	27,32,851	5·30	113	38·53
1900	743·00	5,24,73,019	43,64,006	24,79,433	...	49,563	25,28,996	4·82	109	43·18
1901	743·00	5,50,91,830	53,66,794	30,97,372	...	76,853	31,74,225	5·76	134	42·29
1902	747·75	5,84,82,525	55,60,238	29,72,183	...	76,671	30,48,854	5·92	139	46·55
1903	812·96	6,21,09,547	61,98,433	38,53,972	...	1,04,369	39,58,341	6·37	145	37·82
1904	870·80	6,43,92,183	67,16,933	43,28,496	...	1,16,834	44,45,330	6·90	147	35·56
1905	901·32	6,77,55,566	61,79,116	34,34,390	+37,627	1,69,446	36,41,463	5·37	117	43·81
1906	932·18	7,13,66,623	77,02,976	40,92,699	—9,028	2,01,060	42,84,731	6·00	142	46·99
1907	1,014·90	7,50,01,758	89,59,804	49,72,741	—25,044	2,04,275	51,51,972	6·87	154	44·78
1908	1,016·73	7,91,13,230	79,80,293	43,74,935	+45,015	1,58,939	45,78,889	5·79	162	44·78
1909	1,091·56	8,44,52,801	80,65,653	43,59,479	+31,817	58,411	44,49,707	5·27	142	45·95
1910	1,117·14	8,92,16,995	84,58,223	48,85,946	+58,810	2,01,276	51,46,032	5·77	146	42·23
1911	1,175·84	9,31,30,852	99,29,872	57,59,938	+41,110	2,35,109	60,36,187	6·48	162	42·01
1912	1,177·27	9,68,79,261	1,12,49,175	73,19,499	+38,037	3,09,961	76,67,497	7·91	184	34·93
1st qr. of 1913	1,200·00	9,81,20 363	29,13,331	18,67,611	+21,676	1,37,495	20,26,782	2·07	187	35·89
1913-14	1,240·12	9,89,54,245	1,06,80,208	63,85,474	+1,19,400	2,96,483	68,01,357	6·87	166	40·21
1914-15	1,238·67	9,91,40,377	1,08,71,200	65,71,263	+68,754	2,53,006	68,93,023	6·95	169	39·55
1915-16	1,240·92	9,90 50,532	1,02,15,346	60,74,091	+85,587	2,34,486	63,94,164	6·46	158	40·72
1916-17	1,241·87	9,88,81,177	1,18,37,675	69,49,567	+60,886	2,69,133	72,79,336	7·36	183	41·20
1917-18	1,241·65	9,78,24,472	1,21,80,346	67,12,592	+40,998	2,19,361	69,72,691	7·13	189	44·89

* For the second-half of 1890 only as the line was taken over for working from the 1st July 1890.

Tirhoot railway (3′ 3⅜″ gauge)—

Progress in opening—

Sections of railway.	Date of opening.	Miles.	Total.	Grand total.
1	2	3	4	5
Main line—				
Sonepore to Hajipur	1-8-87	3·23		
Hajipur to Bachhwara	1-4-00	44·32		
Bachhwara to Barauni Junction	1-5-83	10·05		
Barauni Junction to Thana Bihpur	1-3-00	66·17		
Thana Bihpur to Katareah	1-2-01	17·84		
Katareah to Kursela	10-7-02	3·75		
Kursela to Katihar Junction	7-3-01	23·75		
			169·11	
Branches and Extensions—				
Hajipur-Muzaffarpur branch—				
Hajipur to Muzaffarpur	26-10-84	52 85		
			32·85	
Semaria Ghât extension—				
Barauni Junction to Semaria Ghât	1-5-83	5·06		
			5·06	
Bachhwara-Bagaha branch—				
Bachhwara to Dalsing Sarai	1-5-83	6·10		
Dalsing Sarai to Samastipur	1-11-75	14·75		
Samastipur to Muzaffarpur	24-2-77	31·51		
Muzaffarpur to Motihari	1-2-83	50·30		
Motihari to Bettiah	20-12-83	27·06		
Bettiah to Narkatiaganj	17-1-06	22·75		
Narkatiaganj to Bagaha	1-5-07	24·74		
Bagaha to Gundak bridge East bank	9-8-12	1·11		
			178·32	
Carried over	...	...	...	385·34

BENGAL AND NORTH-WESTERN RAILWAY SYSTEM—*contd.*

Tirhoot railway (3′ 3⅜″ gauge)—*contd.*

Progress in opening—*concld.*

Sections of railway.	Date of opening.	Miles.	Total.	Grand total.
1	2	3	4	5
Brought forward . .	...	...	...	385·34
Hajipur extension—				
Hajipur to Hajipur Ghat	26-10-84	1·89	1·89	
Raxaul branch—				
Sagauli to Raxaul	1-3·99	17·87	17·87	
Samastipur-Darbhanga-Narkatiaganj loop—				
Samastipur to Darbhanga	1-11-75	23·40		
Darbhanga to Sitamarhi	1-7-90	41·79		
Sitamarhi to Riga	1-1-91	5·75		
Riga to Dhang	1-7-91	7·00		
Dhang to Bairagnia	1-3-92	5·25		
Bairagnia to Narkatiaganj.	20-12-07	58·75	141·94	
Bhikna Thoree branch—				
Narkatiaganj to Bhikna Thoree	12-2-06	22·11	22·11	
Darbhanga-Bhaptiahi branch—				
Darbhanga to Jhanjharpur	1-2-83	23·66		
Jhanjharpur to Ghogardiha	8-4-86	13·68		
Ghogardiha to Nirmali	8-4-86	6·24		
Nirmali to Bhaptiahi	15-11-87	10·00	53·58	
Bhaptiahi-Pertabganj Ghât branch—				
Bhaptiahi to Raghopur	1-10-88	6·91		
Raghopur to Pertabganj Ghat	1-10-88	4·43	11·34	
Jaynagar branch—				
Sakri to Jaynagar	14-1-05	30·20	30·20	
Bhaptiahi-Mansi branch—				
Bhaptiahi to Makhana Bazar	1-3-07	44·33		
Makhana Bazar to Mansi	15-12-07	15·71	60·04	
Baijnathpur branch—				
Saharsa to Baijnathpur	15-3-08	4·55	4·55	
Monghyr branch—				
Sahebpur Kamal to Monghyr Ghât	7-3-00	6·04	6·04	
Bhagalpur branch—				
Thana Bihpur to Mahadeopur Ghât	16-12-01	11·36		
Mahadeopur Ghât to Barari Ghât (Steamer service). . . .	...	...		
Barari Ghât to Bhagalpur Kachery	15-3-06	3·50		
Bhagalpur Kachery to Bhagalpur station, E. I. Ry.	23-12-10	1·44	16·30	
Samastipur-Rusera-Khagaria extension—				
Samastipur to Rusera Ghât	21-12-12	17·72		
Rusera Ghât to Hasanpur Road	7-5-15	10·81		
Hasanpur Road to Khagaria	1-11-15	24·27	52·80	418·66
TOTAL OPEN MILEAGE .	...	...	...	804·00
DOUBLE LINE—				
Barauni Junction to Bachhwara	22-9-06	10·05	10·05	

Details of construction—

Permanent-way.—The line is laid with 50-lb. and 41¼-lb. flat-footed steel rails on sâl, pynkado, and jarrah sleepers and cast iron sleepers of Denham-Olpherts' pattern.

Ballast.—The line, except the Bhikna Thoree branch, is ballasted with kunkur or broken brick.

Fencing.—The line, except new branches, is fenced with stone posts and 4 wires.

Curves.—The sharpest curve, which is on the main line, is of 2,000 feet radius.

Gradients.—The ruling gradient of the line is 1 in 300, except on 3·42 miles between Samastipur and Pertabganj, where the gradient is 1 in 200 and on the Bhikna Thoree branch where it is 1 in 80. On various river ghât lines the gradients are steeper.

BENGAL AND NORTH-WESTERN RAILWAY SYSTEM—*concld.*

Tirhoot railway (3′ 3½″ gauge)—*concld.*

Contracts—
Main provisions of contracts— } As noted under Bengal and North-Western railway.

Statistics of working (Those for the periods prior to 1905 will be found in Appendix 38 to the Railway Administration Report for 1907—

Year.	Mileage open at end of each year.	Total capital outlay, including suspense, to end of each year, *i.e.*, outlay on (i) lines open and (ii) lines partly or wholly under construction.	Gross earnings.	Net earnings.	Interest divided in the ratio of gross earnings.	Payment made to the Bengal and North-Western Railway Company for working the line.	Total income.	Percentage of total income on total capital outlay given in column (3).	Interest.	Gain or loss to the State *pertaining to each year.*	Earnings per mile per week.	Proportion of expenses to earnings.
1	2	3	4	5	6	7	8	9	10	11	12	13
	Miles.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.		Rs.	Rs.	Rs.	
1905 .	565·45	6,21,36,962	61,81,754	35,95,050	—37,627	1,69,446	33,87,977	5·45	23,54,563	+10,33,414	190	42·45
1906 .	614·30	6,73,40,339	66,80,324	38,97,310	+9,028	2,01,060	37,05,278	5·50	23,17,307	+13,87,971	189	41·52
1907 .	763·54	7,19,99,253	75,39,243	42,21,002	+25,044	2,04,275	40,41,771	5·61	23,80,668	+16,61,103	192	43·68
1908 .	774·69	7,33,81,580	81,68,953	44,81,501	—45,015	1,58,939	42,77,547	5·83	24,68,465	+18,09,082	204	45·14
1909 .	774·69	7,42,61,067	75,53,873	40,09,582	—31,817	58,411	39,19,354	5·28	24,73,136	+14,46,218	188	46·92
1910 .	776·13	7,46,12,530	83,14,066	48,01,820	—58,810	2,01,276	45,41,734	6·09	24,92,047	+20,49,687	206	42·24
1911 .	769·04	7,56,16,782	89,15,376	52,68,260	—41,140	2,35,109	49,92,011	6·60	25,53,319	+24,38,692	223	40·91
1912 .	791·51	7,82,44,847	98,30,665	64,73,034	—38,037	3,09,961	61,25,036	7·83	26,48,419	+34,76,617	239	34·15
1st qr. of 1913	791·51	7,86,99,931	26,02,230	16,91,800	—21,676	1,37,495	15,32,629	1·95	7,16,614	+8,16,015	253	34·99
1913-14	788·16	8,07,86,397	1,02,64,997	64,76,789	—1,19,400	2,96,483	60,60,856	7·50	27,70,371	+32,90,485	250	36.90
1914-15	788·45	8,17,15,012	95,03,765	58,14,830	—68,754	2,53,006	54,93.070	6·72	28,43.125	+26,49,945	232	38.82
1915-16	825·62	8,13,00,448	93,11,906	56,14,514	—85,587	2.34,486	52,94,441	6·91	28,30,356	+24,64,085	217	39.71
1916-17	812 06	8,06,18,533	98,92,880	61,54,482	—60,586	2,69,183	58,24.713	7·22	26,66 899	+31,57,814	234	37.79
1917-18	804 00	8,01,19,133	93,07,091	53,46,691	—40,933	2,19,361	50,86,382	6·35	27,89,261	+22,97,121	223	

BENGAL DOOARS RAILWAY SYSTEM.

Chairman—Robert Miller, Esq.
Secretary—F. J. Horne, Esq.
Offices—Gresham House, Old Broad Street, London, E. C.
Date of registration of the Company.—30th July 1891.

Lines comprised in the system—The Bengal Dooars railway system is made up of—

	Open line.	Under construction or sanctioned for construction.	Total.
	Miles.	Miles.	Miles.
(*a*) Bengal Dooars railway (3′ 3⅜″ gauge)	36·40	...	36·40
(*b*) Bengal Dooars railway extensions (3′ 3⅜″ gauge)	116·56	5·31	121·87
Total	152·96	5·31	158·27

The lines were constructed for opening out the Western Dooars and for the development of the tea industry.

Bengal Dooars railway (3′ 3⅜″ gauge)—

Progress in opening—

Sections of railway.	Date of opening.	Miles.	Total.	Grand total.
1	2	3	4	5
Main line—				
East Bank of the Teesta (Barnes Ghât) to Dam Dim	15-1-93	31·00	31·00	
Branch—				
Lataguri to Ramshai	11-6-93	5·40	5·40	
TOTAL	...	...	...	36·40

Details of construction—

Permanent-way.—The line is laid with 41¼-lb. flat-footed steel rails on sâl sleepers.

Ballast.—The line is ballasted throughout with stone.

Fencing.—The line is unfenced.

Curves.—The sharpest curve is of 1,432 feet radius.

Gradients.—The ruling gradient is 1 in 150.

Contracts and Agreement—

Contract, dated the 27th April 1891 (called the principal contract), *between the Secretary of State and Messrs. Octavius Steel and Company*, Promoters, Bengal Dooars Railway Company, as to the construction, maintenance, management and working of the Bengal Dooars Railway Company's original line, including the ferries connected therewith.

Agreement, dated the 27th April 1891, *between the District Board of Jalpaiguri and Messrs. Octavius Steel and Company*, Promoters, Bengal Dooars Railway Company, as to the payment of a subsidy by the Board to the Company.

Contract, dated the 2nd March 1898 (supplemental to the contract of 1891), *between the Secretary of State and the Bengal Dooars Railway Company*, as to the construction, management, maintenance and working of certain extensions of the Company's then existing railways.

Contract, dated the 27th September 1900 (supplemental to that of 1898), *between the Secretary of State and the Bengal Dooars Railway Company*, as to the extension of time for the completion of the line to Hantupara.

Contract, dated the 7th November 1901 (supplemental to those of 1898 and 1900), *between the Secretary of State and the Bengal Dooars Railway Company*, as to the extension of time for the completion of the line to Bagrakote.

Contract, dated the 16th April 1903 (supplemental to the contract of 1898), *between the Secretary of State and the Bengal Dooars Railway Company*, as to the adoption of 1*s.* 4*d.* per rupee as the "prescribed" rate of exchange.

Contract, dated the 1st May 1914 (supplemental to the contract of 1898), *between the Secretary of State and the Bengal Dooars Railway Company*, as to the adoption of the Government financial year for the preparation of Accounts.

Contract, dated the 6th July 1916 (supplemental to the contract of 1898), *between the Secretary of State and the Bengal Dooars Railway Company*, as to the construction, management, maintenance and working of the Chalsa-Matelli Extension as a part of the undertaking.

BENGAL DOOARS RAILWAY SYSTEM—*contd.*

Bengal Dooars railway (3′ 3⅜″ gauge)—*contd.*

Main provisions of contracts and agreement—

(i) *Land.*—Provided by the Government free of cost to the Company.

(ii) *Government aid.*—Original line: The District Board of Jalpaiguri pay to the Company, out of the District Fund, an annual subsidy of such amount, not exceeding Rs. 4,000, as may be required to make up the net profits in each year to 5 per cent on the capital sum expended.

Original line and Extensions: *Nil.* (It is, however, provided that, on the request of the Company, the Government shall take over the original line and extensions, and shall work and maintain them through the agency of the Eastern Bengal railway, at 40 per cent of the gross receipts in each half-year, paying the remaining 60 per cent over to the Company.)

(iii) *Terms of working.—*
(iv) *Distribution of profits.—* } The whole of the profits go to the Company. (If, on a request made by the Company, the lines be worked by the Eastern Bengal railway the Government retain in each half-year 40 per cent of the gross earnings, the remaining 60 per cent being paid to the Company after deduction of the income-tax payable to Government.)

(v) *Rates and fares.*—Original line, *i.e.*, the Main Line from Barnes Ghât to Mal Junction; the Eastern branch of the Main Line from Lataguri Junction to Ramshai; and the Western branch of the Main Line from Mal Junction to Dam Dim; also the Eastern Extension from Mal Junction to Madarihat; and the Western Extension from Dam Dim to Bagrakote:—Certain maxima rates and fares for goods (other than food grains, salt, coal for construction, working and maintenance, and construction and revenue stores excluding coal), passengers, luggage, carriages, horses and parcels have been fixed. For food grains, salt, coal for construction, working and maintenance, and for construction and revenue stores, certain maxima and minima have been fixed. If the gross receipts of the original railway and of the two (Eastern and Western) Extensions shall in any one year have reached 12 per cent on the combined capital outlay of those lines, Government may reduce the maxima rates and fares by a figure up to 25 per cent, except in the case of the special rates for food grains, salt, coal for construction, working and maintenance, and construction and revenue stores excluding coal, and for third class passengers. Southern Extension, *i.e.*, from Barnes Junction to Lalmanirhat:—Certain maxima and minima rates and fares have been fixed for goods, passengers, carriages, horses and dogs. Luggage, parcels and bullion are carried at the rates passed by the Railway Conference.

(vi) *Special obligations as to the conveyance of—*

(*a*) Mails, troops, police, high Government officials and Government stores.—Mails to be carried under the same terms and conditions as mails were at the date of contract of 1891 being carried on the Eastern Bengal railway, the Government having power to fix the timing of one train each way daily for the carriage of mails. Postal officials travelling on duty to be given free passes.

(*b*) Government bullion and coin, and the persons in charge thereof. — Not specified.

(vii) *Power of the Government to determine contract.*—If the Company fail to work the Original line and the Extensions for six consecutive months, the Government may determine the contract by paying to the Company a sum equal to their actual expenditure up to the date of notice. In the event of the Company failing in any of its obligations for constructing and opening the Chalsa-Matelli Extension, Government have power to take over this Extension also on certain terms.

The Secretary of State has the right to purchase the Original line and the Extensions on the 31st December 1919, and at the end of any succeeding seventh year, by giving 12 months' previous notice. In the event of such purchase the price to be paid for the Original line is to be a cash payment of one and two-fifths of the amount of the invested capital liabilities of the Company; while the price for the Eastern, Southern and Western Extensions is to be a cash payment in England in sterling of a sum equal to 25 years' purchase of the average of the net earnings of the Extensions during the last preceding 5 years, and that for the Chalsa-Matelli Extension a sum equal to 25 years' purchase of the average yearly net earnings during the period which shall have elapsed since opening, provided that such sums shall not exceed by more than 20 per cent, nor be less than, the total capital expenditures and capital liabilities of the Company in sterling as expended on the Extensions or incurred with the sanction of the Government.

(viii) *Power of the Company to surrender contract.*—Nil.

(ix) *Term of contract.*—None specified.

BENGAL DOOARS RAILWAY SYSTEM—*contd.*

Bengal Dooars railway (3′ 3⅜″ gauge)—*concld.*

Statistics of working—

Year.	Mileage open at end of each year.	Total capital outlay, including suspense, to end of each year, i.e., outlay on (i) lines open and (ii) lines partly or wholly under construction.	Gross earnings.	Net earnings.	Percentage of net earnings on total capital outlay given in column (3).	Subsidy from District Board.	Total income.	Percentage of total income on total capital outlay given in column (3).	Earnings per mile per week.	Proportion of expenses to earnings.
1	2	3	4	5	6	7	8	9	10	11
	Miles.	Rs.	Rs.	Rs.		Rs.	Rs.		Rs.	
1893 .	36·40	18,49,091	1,14,812	57,639	3·12	...	57,639	3·12	69	49·80
1894 .	36·40	22,84,223	2,05,286	1,04,291	4·57	4,000	1,08,291	4·74	109	49·20
1895	36·40	23,26,476	2,53,537	1,27,459	5·48	4,000	1,31,459	5·65	125	49·73
1896 .	36·40	24,33,213	2,70,451	1,31,814	5·42	...	1,31,814	5·42	136	51·26
1897 .	36·40	25,78,562	2,86,407	1,45,289	5·63	...	1,45,289	5·63	145	49·27
1898 .	36·40	26,68,050	2,69,089	1,14,620	4·30	4,000	1,18,620	4·45	135	57·40
1899 .	36·40	26,26,748	2,73,038	1,18,417	4·51	4,000	1,22,417	4·66	137	56·63
1900 .	36·40	26,42,695	3,32,730	1,89,460	7·17	...	1,89,460	7·17	168	43·06
1901 .	36·40	26,44,873	3,10,920	1,76,399	6·67	...	1,76,399	6·67	156	43·27
1902 .	36·40	26,50,627	2,73,340	1,71,455	6·47	...	1,71,455	6·47	144	37·27
1903	36·40	26,95,547	3,11,131	2,24,952	8·35	...	2,24,952	8·35	156	27·70
1904	36·40	26,64,642	3,46,277	2,56,651	9·63	...	2,56,651	9·63	175	25·88
1905 .	36·40	27,26,891	3,70,343	2,49,598	9·15	...	2,49,598	9·15	196	32·60
1906 .	36·40	27,33,098	4,08,623	2,96,703	10·86	..	2,96,703	10·86	216	27·39
1907 .	36·40	27,56,535	4,20,705	2,84,722	10·33	...	2,84,722	10·33	222	32·63
1908 .	36·40	27,79,347	4,37,252	3,34,102	12·02	...	3,34,102	12·02	231	23·59
1909 .	36·40	28,40,534	4,46,811	3,54,527	12·48	...	3,54,527	12·48	236	20·65
1910 .	36·40	29,73,769	4,86,375	3,73,343	12·55	...	3,73,343	12·55	257	23·24
1911 .	36·40	31,18,394	4,94,386	3,86,765	12·40	...	3,86,765	12·40	261	21·76
1912 .	36·40	31,71,542	5,41,376	4,16,170	13·12	...	4,16,170	13·12	286	23·13
1st qr. of 1913	36·40	31,76,034	1,13,010	77,510	2·44	...	77,510	2·44	289	31·41
1913-14	36·40	32,04,393	5,91,202	4,36,529	13·62	...	4,36,529	13·62	312	26·16
1914-15	36·40	33,37,555	5,76,739	4,21,605	12·63	...	4,21,605	12·63	305	26·90
1915-16	36·40	33,16,175	6,06,384	4,47,087	13·48	...	4,47,087	13·48	320	26·27
1916-17	36·40	33,16,000	6,60,348	4,87,485	14·70	...	4,87,485	14·70	349	26·18
1917-18	36·40	33,14,942	6,36,781	4,74,792	14·32	...	4,74,792	14·32	336	25.44

Bengal Dooars railway extensions (3′ 3⅜″ gauge)—

Progress in opening—

Sections of railway.	Date of opening.	Miles.	Total.	Grand total.
1	2	3	4	5
Eastern extension—				
Mal to Chalsa	1-4-01	5·40		
Chalsa to Chengmari	1-1-03	13·45		
Chengmari to Dalgaon	23-3-03	15·84		
Dalgaon to Madarihat	14-6-03	9·31		
			44·00	
Southern extension—				
Barnes Junction to Baura	20-4-00	28·30		
Baura to Bhotemari	21-10-00	16·70		
Bhotemari to Lalmanirhat	20-11-00	20·80		
			65·80	
Western extension—				
Dam Dim to Oodlabari	1-5-01	3·30		
Oodlabari to Bagrakot	1-1-02	3·46		
			6·76	
TOTAL OPEN MILEAGE	...	...	...	116·56
UNDER CONSTRUCTION OR SANCTIONED FOR CONSTRUCTION—				
Chalsa to Matelli (sanctioned on 26th September 1913)	...	5·31	5·31	5·31
GRAND TOTAL	...	...	...	121·87

Details of construction—

Permanent-way.—The line has been laid with 41¼-lb. flat-footed steel rails on sâl sleepers.

Ballast.—The line is ballasted throughout with stone.

Fencing.—The line is unfenced.

Curves.—The sharpest curve is of 955 feet radius.

Gradients.—The ruling gradient of the Southern extension is 1 in 200 and of the Eastern and Western extensions, 1 in 100.

Contracts and Agreement—

Main provisions of contracts and agreement— } As noted under Bengal Dooars railway (3′ 3⅜″ gauge).

BENGAL DOOARS RAILWAY SYSTEM—*concld.*

Bengal Dooars railway extension (3' 3⅜" gauge)—*concld.*

Statistics of working—

Year.	Mileage open at end of each year.	Total capital outlay, including suspense, to end of each year, *i.e.*, outlay on (i) lines open and (ii) lines partly or wholly under construction.	Gross earnings.	Net earnings.	Percentage of net earnings on total capital outlay given in column (3).	Earnings per mile per week.	Proportion of expenses to earnings.	Remarks.
1	2	3	4	5	6	7	8	9
	Miles.	Rs.	Rs.	Rs.		Rs.		
1900 . .	66·00	47,11,632	16,191	...	...	14	72·32	The net earning for 1900, 1901, 1902 and 1st half of 1903 were credited to interest on capital during construction.
1901 . .	74·30	62,26,954	1,76,389	...	...	47	60·92	
1902 . .	77·76	72,66,165	2,53,634	...	...	63	65·99	
1903 . .	116·56	80,10,365	3,46,666	79,199	0·99	61	69·78	
1904 . .	116·56	84,97,572	4,15,179	1,08,680	1·28	68	73·85	
1905 .	116·56	87,92,080	5,12,343	1,97,824	2·25	85	61·39	
1906 . .	116·56	89,99,516	5,83,852	2,91,256	3·24	96	50·10	
1907 . .	116·56	90,70,826	6,04,133	1,43,585	1·58	99	76·23	
1908 . .	116·56	90,88,887	6,19,972	3,14,228	3·46	102	49·31	
1909 . .	116·56	91,36,146	6,08,419	3,14,641	3·44	100	48·28	
1910 . .	116·56	92,06,724	6,58,433	3,45,725	3·75	109	47·49	
1911 . .	116·56	93,43,461	7,07,730	3,60,021	3·85	117	49·13	
1912 .	116·56	94,48,641	8,92,405	5,01,116	5·31	147	43·85	
1st qr. of 1913 .	116·56	94,82,328	2,09,414	1,06,083	1·12	138	49·34	
1913-14 .	116·56	95,55,890	10,49,680	5,55,144	5·92	173	46·07	
1914-15 .	116·56	99,98,430	10,21,995	5,09,685	5·10	169	50·13	
1915-16 .	116·56	1,05,48,389	10,35,813	5,08,966	4·83	171	50·86	
1916-17 .	116·56	1,07,40,183	11,09,183	5,16,134	4·81	183	53·47	
1917-18 .	116 56	1,08,54,886	10,72,858	5,01,311	4 62	177	53·27	

BHAVNAGAR STATE RAILWAY SYSTEM.

Lines comprised in the system.—The Bhavnagar State railway system is made up of—

	Open line.	Under construction or sanctioned for construction.	TOTAL.
	Miles.	Miles.	Miles.
(*a*) Bhavnagar State railway (3′ 3⅜″ gauge)	206·31	54·30	260·61
(*b*) Dhrangadra railway (3′ 3⅜″ gauge)	42·71	...	42·71
Total	249·02	54·30	303·32

Bhavnagar State railway (3′ 3⅜″ gauge)—

This line was constructed by Government Agency for the Native State of Bhavnagar (after which it is named). It was worked up to the 31st March 1911 by an Administrative Coalition of the States of Bhavnagar, Gondal, Junagad and Porbandar, which was formed for the purpose of working as one undertaking the railways which, prior to that date, were comprised in the Bhavnagar-Gondal-Junagad Porbandar railway. The Coalition ceased to exist on the 1st April 1911, on and from which date the line is being worked independently as a separate and distinct railway.

Progress in opening—

Sections of railway.	Date of opening.	Miles.	Total.	Grand total.	Remarks.
1	2	3	4	5	6
Main line—					
Bhavnagar Docks to Wadhwan Junction	20-12-80	*104·79	104·79		*Includes 1·21 miles of Dock estate line which is worked for goods traffic only.
Branches—					
Dhasa branch—					
Dhola to Dhasa	19-1-81	15·33	15·33		
Kundla extension—					
Dhasa to Liliamota	1-10-11	20·80			
Liliamota to Savar Kundla	17-3-12	15·00	35·80		
Palitana branch—					
Sihor to Palitana	16-11-10	16·92	16·92		
Jasdan extension—					
Botad to Vinchhia	15-5-13	18·41			
Vinchhia to Jasdan	15-9-13	15·06	33·47		
TOTAL, OPEN MILEAGE	...	...	...	206·31	
UNDER CONSTRUCTION OR SANCTIONED FOR CONSTRUCTION.					
Savar Kundla to Mahuva Dongar to Port Albert Victor } sanctioned on 16th June 1915.	...	...	54·30	54·30	
GRAND TOTAL	...	...		260·61	

Details of construction—

Permanent-way.—The permanent-way consists of 41¼-lb. flat-footed steel rails on creosoted pine, deodar and jodka teak sleepers. The line between Bhavnagar City and mile 73/19 on the main line has been renewed with 50-lb. flat-footed rails, except in station yards. The Jasdan extension is laid with 40-lb. flat-footed rails and the Palitana and Kundla extensions, with second-hand 41¼-lb. flat-footed rails, except 1·85 miles near Liliamota, which are laid with new 40-lb. flat-footed rails.

Ballast.—The line is ballasted with broken stone, with the exception of the length between Chuda and Wadhwan, which is ballasted with kunkur. Newly opened lines are ballasted with stone in cuttings and moorum in banks.

Fencing.—The line is practically unfenced.

Curves.—The sharpest curve is of 1,000 feet radius.

Gradients.—On the main line the ruling gradient is 1 in 200, except for about 10 chains near the Ranpur Bhogawa bridge where it is 1 in 100. Between Sihor and Palitana it is 1 in 100; between Dhasa and Savar Kundla, 1 in 125 and between Botad and Jasdan, 1 in 150.

Agreement—

Nil.—The line is owned and worked by the Bhavnagar State.

Statistics of working—

Year.	Mileage open at end of each year.	Total capital outlay, including suspense, to end of each year, *i.e.*, outlay on (i) lines open and (ii) lines partly or wholly under construction.	Gross earnings.	Net earnings.	Percentage of net earnings on total capital outlay given in column (3).	Earnings per mile per week.	Proportion of expenses to earnings.
1	2	3	4	5	6	7	8
	Miles.	Rs.	Rs.	Rs.		Rs.	
1911	157·95	89,52,481	14,58,671	9,07,436	10·14	178	37·79
1912	173·17	1,09,63,312	14,65,875	7,71,271	7·03	163	47·39
1st qr. of 1913	172·66	1,09,92,709	3,67,171	1,93,685	1·76	164	47 25
1913-14	206·31	1,12,27,133	14,42,984	7,38,766	6·58	135	48·80
1914-15	206·31	1,20,88,075	15,48,360	8,28,088	6·85	144	46·52
1915-16	206·31	1,21,16,506	14,93,420	7,81,522	6·45	139	47 67
1916-17	206 31	1,22,06,582	16,39,442	8,46,223	6·95	153	48 38
1917-18	206 31	1,23,62,479	17,65,940	10,52,256	8 51	165	40·41

BHAVNAGAR STATE RAILWAY SYSTEM—*concld.*

Dhrangadra railway (3′ 3⅜″ gauge)—

This line was constructed for the Native State of Dhrangadra (after which it is named). It was worked up to the 31st March 1911 by an Administrative Coalition of the States of Bhavnagar, Gondal, Junagad and Porbandar, which was formed for the purpose of working as one undertaking the railways which, prior to that date, were comprised in the Bhavnagar-Gondal-Junagad-Porbandar railway. The Coalition ceased to exist on the 1st April 1911, on and from which date the line is being worked by the Bhavnagar State railway.

Progress in opening—

Sections of railway.	Date of opening.	Miles.	Total
1	2	3	4
Wadhwan Junction to Dhrangadra	1-6-98	20·43	
Dhrangadra to Halvad	1-1-15	19·72	
Dhrangadra Quarry branch	1-9-15	2·56	
TOTAL	...	...	42·71

Details of construction—

Permanent-way.—The permanent-way consists of 41¼-lb. flat-footed steel rails laid on deodar and jodka sleepers.

Ballast.—The ballast used is of broken sandstone.

Fencing.—The line is unfenced.

Curves.—The sharpest curve is of 700 feet radius.

Gradients.—The ruling gradient is 1 in 100.

Agreement—

Provisional agreement, dated the 22nd February 1911, *between the Bhavnagar and Dhrangadra States*, as to the maintenance, management and working of the Dhrangadra railway.

Main provisions of agreement—

(i) *Land.*—Provided by the Dhrangadra Durbar free of cost.

(ii) *Government aid.*—Nil.

(iii) *Terms of working.*—
(iv) *Distribution of profits.*— } Forty per cent of gross earnings (subject to a biennial revision), *plus* 5 per cent for hire of rolling-stock and, in addition, actual expenditure on the maintenance of way, works and stations. The forty per cent is subject to reduction to 35 per cent when the earnings per mile per week exceed Rs. 50.

(v) *Rates and fares.*—
(vi) *Special obligations as to the conveyance of*—
(*a*) Mails, troops, police, officials and Government stores.—
(*b*) Bullion and coin.— } The same as are, for the time being, in force on the Bhavnagar State railway.

(vii) *Power of Government to determine agreement.*—Not specified.

(viii) *Power of Durbar to determine agreement.*—
(ix) *Power of Bhavnagar State railway to determine agreement.*— } Not specified pending new agreement.

(x) *Term of agreement.*—To be fixed hereafter.

Statistics of working (Those for the periods prior to 1908 will be found in Appendix 38 to the Railway Administration Report for 1907.)—

Year.	Mileage open at end of each year.	Total capital outlay, including suspense, to end of each year, *i.e.*, outlay on (i) lines open and (ii) lines partly or wholly under construction.	Gross earnings.	Net earnings.	Percentage of net earnings on total capital outlay given in column (3).	Earnings per mile per week.	Proportion of expenses to earnings.
1	2	3	4	5	6	7	8
	Miles.	Rs.	Rs.	Rs.		Rs.	
1908	20·83	5,85,164	53,131	17,756	3·03	19	66·58
1909	20·83	5,85,705	60,202	18,564	3·17	56	69·16
1910	20·83	5,86,796	83,692	34,203	5·83	77	59·13
1911	20·83	5,85,335	93,689	43,546	7·44	86	53·51
1912	20·63	5,85,335	73,811	32,286	5·52	69	56·26
1st qr. of 1913	20·63	5,85,336	20,403	6,389	1·09	76	68·68
1913-14	20·63	5,81,236	87,131	42,643	7·34	81	51·06
1914-15	40·13	11,37,252	1,15,044	59,780	5·26	55	48·04
1915-16	42·71	14,07,179	1,51,106	72,155	5·13	68	52·25
1916-17	42·71	13,93,557	1,19,768	41,623	2·99	54	65·25
1917-18	42·71	14,12,125	1,48,033	57,761	4·09	67	60·98

BURMA RAILWAYS SYSTEM.

Chairman.—Lieut.-Colonel Alfred Glynn Begbie.

Managing Director.—Walter Home, Esq., C.I.E.

Offices.—199, Gresham House, Old Broad Street, London, E.C.

Date of registration of the Company.—21st July 1896.

Lines comprised in the system.—The Burma railways system is made up of—

	Open line.	Under construction or sanctioned for construction.	Total.
	Miles.	Miles.	Miles.
(*a*) Burma railways (3′ 3⅜″ gauge)	1,341·85	...	1,341·85
(*b*) Burma railways extensions (3′ 3⅜″ gauge)	186·93	...	186·93
(*c*) Southern Shan States railway (3′ 3⅜″ gauge)	69·68	34·25	103·93
Total	1,598·46	34·25	1,632·71

Burma railways (3′ 3⅜″ gauge)—

The Burma Railways Company was formed in 1896 for the purpose of taking over the working of the then existing system of State railways (3′ 3⅜″ gauge) in Burma and extending it by the construction of other lines, particularly one from Mandalay to Kunlong. The railways taken over by the Company from Government on the 1st September 1896 comprised the following lines:—Rangoon to Prome on the Irrawaddy river; Rangoon to Mandalay, and thence to the bank of the Irrawaddy, opposite Sagaing and Sagaing to Myitkyina and a branch to Katha, whence there is communication by river with Bhamo.

Progress in opening—

Sections of railway.	Date of opening.	Miles.	Total.	Grand total.	Remarks.
1	2	3	4	5	6
IRRAWADDY SECTION—					
Rangoon to Prome	1-5-77	161·00	161·00		
SITTANG SECTION—					
Main Line—					
Rangoon to Nyaunglebin	4-2-84	93·00			
Nyaunglebin to Toungoo	1-7-85	73·00	166·00		
Branches—					
Suburban lines*	1-3-80 / 15-7-90	6·00 / 3·00			
Malagon to Bauktaw†	25-8-11	1·70	10·70		
MANDALAY SECTION—					
Main Line—					
Toungoo to Pyinmana	1-5-88	59·00			
Pyinmana to Yamethin	15-11-88	49·00			
Yamethin to Mandalay	1-3-89	112·00	220·00		
Branches—					
Myingyan branch—					
Thazi to Meiktila	10-5-93	12·89			
Meiktila to Myingyan	15-11-99	57·21	70·10		
Mandalay Shore branch—					
Mandalay to Mandalay shore*	13-4-89	2·50	2·50		
MU VALLEY SECTION—					
Main line—					
Myohaung to Amarapura shore	22-11-91	6·00			
Sagaing to Shwebo	1-7-91	53·05			
Shwebo to Wuntho	4-4-92	99·46			
Wuntho to Nankan	1-11-94	15·46			
Nankan to Mohnyin	21-10-95	74·35			
Mohnyin to Mogaung	1-3-96	52·34			
Mogaung to Myitkyina	1-1-98	36·63	337·29		
Branches—					
Sagaing-Alon branch—					
Ywataung to Alon	15-4-00	70·46	70·46		
Katha branch—					
Naba to Katha	2-10-95	15·00	15·00		
MANDALAY-KUNLONG SECTION—					
Myohaung to Sedaw	1-1-98	13·45			
Sedaw to Maymyo	1-4-00	26·10			
Maymyo to Nawnghkio	20-5-00	34·10			
Nawnghkio to Hsipaw	1-6-01	53·25			
Hsipaw to Lashio	1-3-03	50·94	177·84		
Carried over	...	...	...	1,230·89	

*Worked for goods traffic only.
†Worked for passenger traffic only.

BURMA RAILWAYS SYSTEM—*contd.*

Burma railways (3′ 3⅜″ gauge)—*contd.*

Progress in opening—*concld.*

Sections of railway.	Date of opening.	Miles.	Total.	Grand total.	Remarks.
1	2	3	4	5	6
Brought forward .	...	...	...	1,230·89	
BASSEIN-HENZADA-LETPADAN SECTION—					
Suburban line at Bassein*	15-1-04	3·18			* Worked for good traffic only.
Bassein to Henzada	15-12-02	82·25			
Henzada to Henzada shore	20-3-03	2·46			
Tharawaw on the east bank of the Irrawaddy river to Letpadan	20-3-03	23·07			
			110·96	110·96	
TOTAL .	...	...	...	1,341·85	
DOUBLE LINE—					
Irrawaddy section—					
Rangoon to Kemmendine	30-10-89	3·50			
Kemmendine to Insein	10-1-90	5·50			
Insein to Hlawga	25-8-05	7·92			
Hlawga to Mogyobyit	1-10-07	3·25			
Mogyobyit to Hmawbi	23-11-07	4·13			
Hmawbi to Wanetchaung	14-2-08	5·00			
			29·30		
Sittang section—					
Rangoon to Pazundaung	1-6-01	0·70			
Pazundaung to Thingangyun	19-4-05	3·40			
Thingangyun to Togyaunggale	2-1-10	2·71			
Togyaunggale to Tewainggyi	30-11-07	4·08			
Tewainggyi to Ledaunggan	23-11-07	4·71			
Ledaunggan to Dabein	10-1-08	6·69			
Dabein to Tongyi	3-1-10	7·75			
Tongyi to Kyauktan	4-1-09	4·06			
Kyauktan to Payathonzu	15-2-09	8·26			
Payathonzu to Pegu	4-1-09	3·51			
			45·87		
Pegu-Pyuntaza section—					
Pegu to Shwehle	10-8-11	5·57			
Shwehle to Payagyi	26-5-11	4·91			
Payagyi to Pyinbongyi	22-5-11	7·83			
Pyinbongyi to Kadok	1-8-11	6·25			
Kadok to Paungdawthi	2-10-11	4·73			
Paungdawthi to Deiku	26-5-11	5·30			
Deiku to Pyuntaza	3-8-11	6·73			
			41·32		
Mandalay section—					
Myohaung to Mandalay	3-10-99	2·45			
			2·45		
TOTAL, DOUBLE LINE .	...	...	...	118·94	

Details of construction—

Permanent-way.—The rails in use on the system are 60-lb., 50-lb. and 41¼-lb. flat-footed steel. The sleepers throughout are of Burma teak, pynkado, Thitya, Engyin and Australian hard woods, pynkado largely predominating.

Ballast.—The ballast used is either shingle or broken stone.

Fencing.—The main line, from Prome to Rangoon and Rangoon to Mandalay, and the Bassein-Henzada line are fenced. The Mu Valley line is generally unfenced, except at stations. The Lashio, Myingyan and the Sagaing-Alon branches are unfenced, except at certain stations.

Curves.—On the main line (Rangoon to Mandalay), the sharpest curve has a radius of 573 feet, on the Rangoon-Prome section, of 1,146 feet. The sharpest curves on the Bassein-Henzada, Letpadan-Tharawaw, Thazi-Myingyan and Sagaing-Alon branches have radii of 955, 1,432, 1,273 and 2,865 feet, respectively; on the Lashio branch, of 337 feet; on the Mu Valley line, from Sagaing to Myitkyina, including the Katha branch, of 573 feet.

Gradients.—The ruling gradient on the main line from Prome to Rangoon and Rangoon to Mandalay and Myohaung to Amarapura shore is 1 in 200, except for a short length at mile 124 on the Prome branch, where it is 1 in 150; on the Mu Valley section, from Sagaing to Kanbalu, 1 in 200 uncompensated, from Kanbalu to Naba 1 in 100, and Naba to Myitkyina, 1 in 100 uncompensated, with a banking section, from Mawhan to Mohnyin, of 1 in 60 uncompensated. On the Lashio branch it is 1 in 25 compensated between Sedaw and Thondaung, and 1 in 40 compensated, between Thondaung and Lashio; on the Myingyan branch, 1 in 100 uncompensated; on the Sagaing-Alon branch 1 in 150 uncompensated; and on the Katha branch 1 in 50 uncompensated. Between Letpadan and Tharawaw and Henzada and Bassein, it is 1 in 200.

Contracts—

Contract, dated the 9th March 1897 (called the principal contract), *between the Secretary of State and the Burma Railways Company,* as to taking over the Burma railways, the construction of other railways and their maintenance, management and working.

BURMA RAILWAYS SYSTEM—*contd.*

Burma railways (3′ 3⅜″ gauge)—*contd.*

Contracts—*concld.*

Contract, dated the 6th February 1902 (supplemental to the contract of 1897), *between the Secretary of State and the Burma Railways Company*, as to the issue of debenture stock of £1,250,000.

Contract, dated the 5th May 1903 (supplemental to the contract of 1897), *between the Secretary of State and the Burma Railways Company*, as to the adoption of 1*s.* 4*d.* as the "prescribed" rate of exchange.

Contract, dated the 22nd February 1907 (supplemental to the contracts of 1897 and 1903), *between the Secretary of State and the Burma Railways Company*, as to the construction, maintenance, management and working of the Pegu-Moulmein and Henzada-Kyangin extensions and the Daga loop line

Contract, dated the 23rd February 1907 (supplemental to the contracts of 1897, 1902 and 1903), *between the Secretary of State and the Burma Railways Company*, regarding advances of capital amounting to Rs. 85 lakhs in 1903 to 1906.

Contract, dated the 9th June 1909 (supplemental to the contracts of 1897, 1902, 1903 and the 22nd and 23rd February 1907), *between the Secretary of State and the Burma Railways Company*, as to the conditions on which the Company was authorised to increase its share capital by £1,000,000 and other matters.

Letter from the Burma Railways Company No. 523 (General), dated the 28th March 1911, to the Under Secretary of State for India;
Letter from the India Office No. P. W. 596, dated the 18th April 1911, to the Burma Railways Company;
} as to the provision of funds to meet further capital expenditure on the Burma railways.

Letter from the Burma Railways Company No. 591 (General), dated the 13th March 1913, to the Under Secretary of State for India, accepting the proposal that advances made by the Secretary of State on and subsequent to 1st April 1913 should bear interest at 4 per cent per annum.

Contract, dated the 7th April 1913, (read as part of the supplementary contract of 22nd February 1907), *between the Secretary of State and the Burma Railways Company*, defining the manner in which the earnings of the Burma Railways Extensions shall be ascertained and in particular the proper apportionment of receipts and expenditure in connection with through traffic and of expenses of stations common to the Burma Railways and the Burma Railways Extensions.

Contract, dated the 24th March 1914 (supplemental to the contracts of 1897, 1902, 1903, the 22nd and 23rd February 1907 and the 9th June 1909) *between the Secretary of State and the Burma Railways Company*, as to the adoption of the Government financial year for the preparation of accounts.

Letter from the India Office No. P.W. 216, dated the 18th February 1915, to the Burma Railways Company, stating that advances or overdrafts will not be granted after 31st March 1915 at a rate of interest lower than 4¼ per cent.

Contract, dated the 3rd October 1916 (Supplemental to, and modifying, the contract of 22nd February 1907) *between the Secretary of State and the Burma Railways Company*, as to the exclusion of the Daga loop line from the list of State railways mentioned in the contract of 22nd February 1907.

Telegram from the Secretary of State, dated the 14th February 1918, stating that advances or over drafts will not be granted after 31st March 1918 at a rate of interest lower than 5½ per cent.

Main provisions of contracts—

(i) *Land.*—To be provided by Government at the cost of capital, subject, as regards land outside British territory, to the condition that it can be acquired on reasonable terms.

(ii) *Government aid.*—The Government undertake to pay interest—

(*a*) at 2½ per cent per annum on the Company's share capital of £2,000,000 raised under the contract of the 9th March 1897 (with an additional ¼ per cent per annum up to and inclusive of the 1st July 1901);

(*b*) at 3 per cent per annum on £1,250,000 raised by the Company by the issue of debenture stock under the contract of the 6th February 1902; and

(*c*) at 2½ per cent. per annum on the Company's additional share capital of £1,000,000 (excluding the premium thereon which realized £20,000) raised under the contract of the 9th June 1909.

(iii) *Distribution of profits.*—The net receipts of each year are applied in payment to Government of—

(*a*) interest at 3 per cent per annum on the Company's debenture stock of £1,250,000;
(*b*) interest at 2½ per cent per annum on the Company's share capital of £3,000,000;
} paid half-yearly to the Company by Government;

(*c*) interest at 2½ per cent per annum on the Government assumed capital; and

(*d*) interest on capital overdrawn by Company at 3¾ per cent per annum up to the 31st March 1913, at 4 per cent per annum from 1st April 1913 to 31st March 1915, at 4¼ per cent per annum from 1st April 1916 to 31st March 1918 and at 5½ per cent per annum thereafter.

The surplus profits, after allowing for interest in any year ending on a 31st March, are to be divided in the ratio of the Government and Company's capital, which, for the purpose of this division, has been stated at £5,750,000 and £3,000,000, respectively, and works out to $\frac{23}{35}$ths to the former and $\frac{12}{35}$ths to the latter.

(iv) *Rates and fares.*—Maxima and minima for the different classes and descriptions of services and terminals to be approved by the Government.

BURMA RAILWAYS SYSTEM—*contd.*

Burma railways (3′ 3⅜″ gauge)—*concld.*

Main provisions of contracts—*concld.*

(v) *Special obligations as to the conveyance of.*—

(*a*) Mails, troops, police, high Government officials and Government stores.—To be conveyed on the same general conditions as on other 3′ 3⅜″ gauge State railways, and at rates to be approved by the Government.

(*b*) Government bullion and coin, and the persons in charge thereof.—To be conveyed at special rates approved by the Government.

(vi) *Power of the Government to determine contract.*—The Government may, by giving 12 months' previous notice, determine the contract as to the Company's undertaking on the 31st December 1928, or on the 31st December 1935, or on the 31st December 1941, or on the 31st December of any succeeding tenth year. On the determination of the contract from any cause, the Government is to repay to the Company in sterling at par the capital raised by the latter, and also to take over the liability of the Company in respect of the debenture stock.

As to the determination of the contract of the 22nd February 1907, as to the construction and working of new branches, see Burma Railways Extensions (3′ 3⅜″ gauge).

(vii) *Power of the Company to surrender contract.*—Nil.

(viii) *Term of contract* [*if not determined under* (vi) *or* (vii)].—None specified.

Statistics of working (Those for the periods prior to 1897 will be found in Appendix 38 to the Railway Administration Report for 1907).—

Year.	Mileage open at end of each year.	Total capital outlay, including suspense, to end of each year, *i.e.*, outlay on (*i*) lines open and (*ii*) lines partly or wholly under construction.	Gross earnings.	Net earnings.	Percentage of net earnings on total capital outlay given in column (3).	Interest.	Company's share of surplus profits (based on terms of contract) *attributable to each year.*	Gain or loss to the State *pertaining to each year.*	Earnings per mile per week.	Proportion of expenses to earnings.
1	2	3	4	5	6	7	8	9	10	11
	Miles.	Rs.	Rs.	Rs.		Rs.	Rs.	Rs.	Rs.	
1897.	886·50	8,73,31,890	86,76,403	38,82,673	4·45	38,31,674	*1,13,696	—62,697	188	55·25
1898.	936·13	9,24,93,509	89,91,451	37,88,523	4·10	39,49,899	1,94,988	—3,56,364	185	57·87
1899.	993·34	10,11,17,647	88,25,724	35,78,407	3·54	38,35,209	1,67,935	—4,24,737	179	59·45
1900.	1,124·00	11,03,96,635	1,10,29,947	48,94,824	4·43	38,49,026	4,22,384	+6,23,414	196	55·62
1901.	1,177·70	11,99,22,408	1,18,85,329	49,89,656	4·16	40,41,108	4,38,924	+5,09,624	198	58·02
1902.	1,260·50	12,70,23,590	1,25,02,671	52,72,683	4·15	43,94,823	4,49,065	+4,28,795	203	57·82
1903.	1,336·97	13,01,31,876	1,36,14,478	52,19,322	4·01	44,06,500	4,37,976	+3,74,846	198	61·66
1904.	1,340·15	13,34,32,891	1,51,02,418	65,70,760	4·92	44,71,268	6,90,759	+14,08,733	217	56·49
1905.	1,340·15	13,55,91,056	1,57,75,957	61,81,063	4·56	45,35,974	6,02,907	+10,42,182	226	60·82
1906.	1,340·15	13,97,87,368	1,57,32,205	58,61,913	4·19	46,13,499	5,28,858	+7,19,556	226	62·74
1907.	1,340·15	14,50,55,112	1,66,16,416	59,31,163	4·09	43,49,484	5,21,825	+10,60,154	238	64·30
1908.	1,340·15	15,13,95,482	1,79,07,641	71,74,075	4·74	46,94,333	7,61,052	+17,18,690	257	59·94
1909.	1,340·15	15,50,28,745	1,83,49,539	66,59,920	4·30	44,55,997	9,70,207	+12,33,716	263	63·70
1910.	1,340·15	16,04,60,604	1,85,32,674	71,60,233	4·46	49,39,611	11,39,494	+10,81,128	266	61·36
1911.	1,341·85	16,48,65,768	1,92,44,330	66,72,090	4·05	49,91,981	9,71,526	+7,08,583	276	65·33
1912.	1,341·85	17,01,08,309	2,02,44,872	81,76,037	4·81	51,39,866	14,53,577	+15,82,594	290	59·61
1st qr. of 1913	1,341·85	17,10,28,173	68,77,451	39,30,035	2·30	13,07,826	10,02,157	+16,20,052	394	42·86
1913-14.	1,341·85	17,48,43,821	2,24,77,965	1,04,50,706	5·98	54,01,568	21,70,845	+28,78,353	322	53·50
1914-15.	1,341·85	17,72,23,413	2,16,56,550	94,60,286	5·34	55,96,357	17,75,528	+21,48,401	310	56·32
1915-16.	1,341·85	17,80,91,834	1,99,85,692	84,33,260	4·74	56,05,925	14,11,122	+14,16,213	286	57·80
1916-17.	1,341·85	17,91,23,927	2,23,20,383	1,08,30,219	6·05	54,39,534	22,06,333	+31,84,352	322	51·48
1917-18.	1,341·85	17,84,94,701	2,22,74,705	1,04,85,250	5·87	56,39,287	†20,72,760	+27,73,203	319	52·93

* From 1st September 1896 to 31st December 1897.

† The surplus profits for 1917-18 were divided between Government and the Company in the proportion of £5,750,000 to 3,000,000 which works out to a ratio of 23 : 12.

Burma railways extensions (3′ 3⅜″ gauge)—

Progress in opening—

Sections of railway.	Date of opening.	Miles.	Total.	Grand total.
1	2	3	4	5
Pegu Moulmein extension—				
Pegu to Nyaungkashe (Sittang River)	15-4-07	121·27		
Nyaungkashe (Sittang River) to Kyaikto	15-8-07	...		
Kyaikto to Kawkadut	14-9-07	...		
Kawkadut to Martaban (opposite Moulmein)	25-9-07	...		
			121·27	
Henzada-Kyangin extension—				
Henzada to Danbi	1-7-07	13·50		
Danbi to Kyangin	14-12-08	52·16		
			65·66	
TOTAL	...	...	...	186·93

BURMA RAILWAYS SYSTEM—*contd.*

Burma railways extensions (3′ 3⅜″ gauge)—*contd.*

Details of construction—

Permanent-way.—The permanent-way consists of 50-lb. flat-footed steel rails laid principally on pynkado sleepers.

Ballast.—The ballast consists chiefly of broken stone and shingle.

Fencing.—The Pegu-Moulmein extension is fenced but not the Henzada-Kyangin extension. Level crossings are provided with either gates or chains and posts.

Curves.—The radius of the sharpest curve on the Pegu-Moulmein section is 1,058 feet and that on the Henzada-Kyangin section is 1,432 feet.

Gradients.—The ruling gradient is 1 in 300 on the Pegu-Moulmein extension; and 1 in 200 on the Henzada-Kyangin extension, uncompensated.

Contracts—

Contract, dated the 22nd February 1907 (supplemental to the contracts of 1897 and 1903, noted under Burma railways, 3′ 3⅜″ gauge), *between the Secretary of State and the Burma Railways Company*, as to the construction, maintenance, management and working as State railways of the Pegu-Moulmein and Henzada-Kyangin extensions and the Daga loop line.

Contract, dated the 7th April 1913, (read as part of the supplementary contract of 22nd February 1907), *between the Secretary of State and the Burma Railways Company*, defining the manner in which the earnings of the Burma Railways Extensions shall be ascertained and in particular the proper apportionment of receipts and expenditure in connection with through traffic and of expenses of stations common to the Burma Railways and Extensions.

Contract, dated the 3rd October 1916 (supplemental to, and modifying, the contract of 22nd February 1907) *between the Secretary of State and the Burma Railways Company*, as to the exclusion of the Daga loop line from the list of State railways mentioned in the contract of 22nd February 1907.

Main provisions of contracts—

(i) *Land.*—As under Burma railways (3′ 3⅜″ gauge).

(ii) *Government aid.*—All moneys required for the purposes of the extensions shall be supplied by the Secretary of State according to such arrangements as shall, from time to time, be made between the Secretary of State and the Company.

(iii) *Terms of working.*—
(iv) *Distribution of profits.*—
Separate half-yearly accounts are kept for (*a*) the whole of the Company's system and (*b*) for each of the extensions, except in regard to the Revenue Abstracts B. to G., inclusive, and sub-head I of Abstract A. which are for the system as a whole. The total working expenses of the whole system, are divided between each of the extensions and the rest of the Company's system in the ratio of their respective gross earnings, and the share of expenses so attributed, together with the maintenance expenditure relating exclusively thereto under sub-heads II to VII of Abstract A. are deemed to be the actual working expenses of each. The extensions have also to bear proportionate charges in respect of interest on capital cost of workshop buildings and plant and joint station expenses. After deducting from the gross earnings the working expenses so arrived at, the balance forms the "net revenue receipts."

The net revenue receipts for each complete financial year are applied in payment of interest at 3½ per cent per annum on the total capital outlay on each extension (including the value of land), and the mileage share of interest on the main line stores and stores suspense balances; and the residue, if any, is divided between the Government and the Company in the proportion of ¾ths to the former and ¼th to the latter.

(v) *Rates and fares.*—As under Burma railways (3′ 3⅜″ gauge).

(vi) *Special obligations as to the conveyance of.*—
(*a*) Mails, troops, police, high Government officials and Government stores.—
(*b*) Government bullion and coin, and the persons in charge thereof.—
As under Burma railways (3′ 3⅜″ gauge).

(vii) *Power of the Government to determine contract.*—
(viii) *Power of the Company to surrender contract.*—
The contract may be determined on twelve months' notice given by either party to the other on the 30th June 1919, or on the 30th June of any subsequent fifth year. If the principal contract [noted under Burma railways (3′ 3⅜″ gauge)] shall at any time be determined by virtue of its provisions, then this contract shall also thereupon cease and determine. On the failure by the Company effectually to remedy any breach of this contract or of its stipulations or provisions within six months after due notice shall have been given by the Secretary of State in England, he may, on the expiration of six months or later, determine the contract by giving to the Company in England notice in writing of such determination.

Upon the determination of the contract the Company shall give possession to the Government of the new lines, all property belonging thereto and all moneys then payable, after which the Government shall indemnify the Company against all debts and liabilities as may have been incurred with the sanction of Government and be then subsisting on account of the new lines.

(ix) *Term of contract* [*if not determined under* (vii) *and* (viii)].—Not specified.

BURMA RAILWAYS SYSTEM—*concld.*

Burma railways extensions (3′ 3⅜″ gauge)—*concld.*

Statistics of working—

Year.	Mileage open at end of each year.	Total capital outlay, including suspense, to end of each year, *i.e.*, outlay on (i) lines open and (ii) lines partly or wholly under construction.	Gross earnings.	Net earnings.	Percentage of net earnings on total capital outlay given in column (3).	Interest.	Company's share of surplus profits (based on terms of contract) *attributable to each year.*	Gain or loss to the State *pertaining to each year.*	Earnings per mile per week.	Proportion of expenses to earnings.
1	2	3	4	5	6	7	8	9	10	11
	Miles.	Rs.	Rs.	Rs.		Rs.	Rs.	Rs.	Rs.	
1907 .	134·77	1,64,71,233	1,68,518	70,441	0·43	2,10,263	...	—1,39,822	82	58·20
1908 .	186·93	1,99,85,700	9,01,008	4,55,558	2·28	6,96,054	...	—2,40,496	93	49·44
1909 .	186·93	2,11,46,631	11,19,902	4,27,510	2·02	6,97,884	...	—2,70,374	115	61·83
1910 .	186·93	2,13,87,484	12,92,969	4,75,061	2·22	7,10,276	...	—2,35,215	133	63·26
1911 .	186·93	2,15,43,179	14,26,979	5,23,234	2·43	7,28,480	...	—2,05,246	147	63·33
1912 .	186·93	2,19,58,911	16,49,154	6,95,299	3·17	7,42,258	9,835	—56,794	170	57·84
1st qr. of 1913.	186·93	2,19,56,599	5,53,883	2,81,408	1·28	1,86,586	23,163	+71,659	228	49·19
1913-14.	186·93	2,20,21,165	21,84,418	10,16,827	4·62	7,65,057	78,717	+1,73,053	225	53·45
1914-15.	186·93	2,21,11,074	16,42,874	5,11,249	2·31	7,71,293	...	—2,60,044	169	68·88
1915-16.	186·93	2,20,45,399	17,57,133	6,61,927	3·00	7,66,222	2,135	—1,06,430	181	62·33
1916-17.	186·93	2,20,39,576	20,69,109	9,73,906	4·42	7,26,186	76,635	+1,71,085	213	52·93
1917-18.	186·93	2,19,26,373	20,58,705	9,39,431	4·28	7,62,577	74,150	+1,02,704	212	51·87

Southern Shan States railway (3′ 3⅜″ gauge)—

Progress in opening—

Sections of railway.	Date of opening.	Miles.	Total.	Grand total.
1	2	3	4	5
Thazi to Kywedatson	15-6-12	16·05		
Kywedatson to Yinmabin	20-8-14	6·95		
Yinmabin to Kalaw	15-12-14	39·19		
Kalaw to Aungban	15-2-15	7·19		
TOTAL OPEN MILEAGE .	...	...	69·68	
UNDER CONSTRUCTION OR SANCTIONED FOR CONSTRUCTION—				
Aungban to Yawnghwe (sanctioned on 23rd July 1909)	...	34·25		
			34·25	
GRAND TOTAL .	...	...	...	103·93

Details of construction—

Permanent-way.—The permanent-way consists of 60-lb. and 50-lb. flat-footed steel rails laid on pynkado, Thitya, Engzin and steel transverse peapod sleepers.

Ballast.—The ballast consists of stone and shingle.

Fencing.—Except at stations, the line is unfenced.

Curves.—The radius of the sharpest curve on the open section is 338·69 feet.

Gradients.—The ruling gradient on the open portion is 1 in 25.

Contracts—

The construction of the line up to Aungban was carried out for the State by the Burma Railways Company which is also working the open section pending the execution of an agreement which is under consideration.

Statistics of working—

Year.	Mileage open at end of each year	Total capital outlay, including suspense, to end of each year, *i.e.*, outlay on (i) lines open, and (ii) lines partly or wholly under construction.	Gross earnings.	Net earnings.	Percentage of net earnings on total capital outlay given in column (3).	Interest.	Companys' share of surplus profits (based on terms of contract) *attributable to each year.*	Gain or loss to the State *pertaining to each year*	Earnings per mile per week.	Proportion of expenses to earnings.
1	2	3	4	5	6	7	8	9	10	11
	Miles.	Rs.	Rs.	Rs.		Rs.	Rs.	Rs.	Rs.	
1912 . .	16·05	83,94,878	11,090	7,927	0·09	...	...	...	25	28·52
1st qr. of 1913.	16·05	97,96,426	5,797	3,635	0·04	77,336	...	—73,701	28	37·28
1913-14 .	23·00	1,32,95,785	33,020	—6,046	...	4,06,028	...	—4,12,074	28	118·33
1914-15 .	70·25	1,52,66,096	87,016	5,999	0·04	4,99,719	...	—4,93,720	24	98·10
1915-16 .	69·68	1,55,87,886	3,39,165	21,414	0·14	5,35,702	...	—5,14,288	94	93·68
1916-17 .	69·68	1,53,51,017	3,88,109	55,277	0·36	5,09,935	...	—4,54,658	93	83·65
1917-18 .	69·68	1,54,33,725	4,39,885	22,949	0·15	5,33,345	...	—5,10,396	131	94·78

CHICKJAJUR-CHITALDRUG RAILWAY (3′ $3\frac{3}{8}$″ gauge).

This line was sanctioned for construction by the Mysore Durbar in Foreign and Political Department Letter No. $\frac{128}{1}$-I.B., dated the 28th January 1914. Work is in progress.

Progress in opening—

Section of railway.	Date of opening.	Miles.	Total.
1	2	3	4
Chickjajur to Chitaldrug (sanctioned on 28th January 1914)	...	21·07	21·07

DIBRU-SADIYA RAILWAY SYSTEM.

Chairman.—The Lord Ribblesdale.
Secretary.—S. Maclean Jack, Esq.
Offices.—Blomfield House, 85, London Wall, London, E.C.
Date of registration of the Company.—30th July 1881.

Lines comprised in the system.—The Dibru-Sadiya railway system is made up of—

	Miles.
(*a*) Dibru-Sadiya railway (3′ 3⅜″ gauge)	86·02
(*b*) Ledo and Tikak-Margherita Colliery railway (3′ 3⅜″ gauge)	5·50
Total	91·52

Dibru-Sadiya railway (3′ 3⅜″ gauge)—

Progress in opening—

Sections of railway.	Date of opening.	Miles.	Total.	Grand total.
1	2	3	4	5
Main line—				
Lower steamer ghat on the left bank of the Brahmaputra river, near Dibrugarh Bazar, eastward as far as the Dinjan stream	15-8-82	15·00		
Dinjan stream to Makum Junction	16-7-83	23·50		
Makum Junction to Dum-Duma	2-5-84	10·00		
Dum-Duma to Talap	5-2-85	6·00		
			54·50	
Makum branch—				
Makum Junction to Dihing bridge	2-5-84	23·00		
			23·00	
Saikhoa extension—				
Talap to Saikhoa Ghat	1-5-10	8·52		
			8·52	
GRAND TOTAL	...	...	...	86·02

Details of construction—

Permanent-way.—Of the main line and Makum branch, 27½ miles are laid with 60-lb. and the remainder with 50 and 41¼-lb. flat-footed steel rails laid on sâl, nahor and uriam sleepers and on cast-iron plates of the Denham-Olpherts' type. The Saikhoa extension is laid for 3½ miles with 50-lb. rails and for the remainder with 41¼-lb. rails on uriam sleepers.

Ballast.—The main line is ballasted throughout, and the branch line partially, with broken stone.

Fencing.—The line is unfenced, with the exception of a short length at Dibrugarh.

Curves.—The sharpest curve is of 700 feet radius.

Gradients.—The ruling gradient is 1 in 150 on the main line and 1 in 100 on the Saikhoa extension.

Contracts—

Dated the 26th May 1880 (called the principal contract) *between the Secretary of State and the Assam Railway Company*, subsequently called the Assam Railways and Trading Company, as to the construction, maintenance, management and working of the Dibru-Sadiya railway with branches.

Dated the 25th July 1881 (supplemental to that of 1880) *between the Secretary of State and the Assam Railways and Trading Company*, modifying the contract of 1880 and providing that the Company shall have the preferential option for the construction and working of any other line(s), in the Luckimpore District—an option which has since been surrendered in consideration of an undertaking by the Secretary of State that the Government right of purchase shall not be exercised until after 1910, *vide* letter from the India Office to the Company's London Board, No. 2193, dated the 13th December 1898.

Letter No. $\frac{223}{1758}$ P.W., dated the 31st March 1905, *from the Honourable the Chief Commissioner of Assam to the Government of India in the Department of Commerce and Industry*;
Telegram No. R. P. 5, dated the 11th May 1905, *from the Railway Board to the Honourable the Chief Commissioner of Assam*;
} as to the construction of the Saikhoa extension.

Dated the 28th October 1914 (supplemental to those of 1880 and 1881) *between the Secretary of State and the Assam Railways and Trading Company*, as to the maintenance and working of the Saikhoa extension, the alteration in the dates for the exercise of the option of purchase of the Company's railway and the adoption of the Government Financial year for the preparation of accounts.

Main provisions of contracts—

(i) *Land.*—Provided by the Government free of cost to the Company.

(ii) *Government aid.*—Annual subsidy on the main line for 20 years from the date of opening, not exceeding Rs. 80,000 in any one year, or such smaller sum as, added to net earnings of the main line, will make up 5 per cent on the paid-up capital (exclusive of cost of Makum Branch).

Annual subsidy on the Makum branch for 20 years from the date of opening, not exceeding Rs. 20,000 in any one year, or such smaller sum as, added to the net earnings of the branch, will make up 5 per cent on the capital cost.

Annual subsidy on the Saikhoa extension for 10 years from the date of opening at the rate of Rs. 600 per mile.

DIBRU-SADIYA RAILWAY SYSTEM—*contd.*

Dibru-Sadiya railway (3′ 3⅜″ gauge)—*concld.*

Main provisions of contracts—*concld.*

The subsidies are subject to deduction if the Company fail to keep the line in good order and properly equipped, and to work it.

(*Note.*—The period of subsidy, for the main line and Makum branch, terminated as from the 30th June 1903, *vide* letter from the Honourable the Chief Commissioner of Assam in the Public Works Department, to the Examiner of Public Works Accounts, Assam, No. 1739-P. W./2898, dated the 11th June 1894.)

(iii) *Distribution of profits.*—All the profits go to the Company.

(iv) *Rates and fares.*—To be approved by the Government. If, after five years from the date of opening of the main line, the net profits of the Company exceed 12 per cent of their paid-up capital, the Government may require the Company to make such reduction in their rates and fares as shall not lead to a diminution of the net profits below 12 per cent.

(v) *Special obligations as to the conveyance of.*—

(*a*) Mails, troops, high Government officials and Government stores.—To be conveyed at rates to be agreed upon from time to time, not exceeding those now paid in the district concerned.

(*b*) Government bullion and coin, and the persons in charge thereof.—Not specified.

(vi) *Power of the Government to determine contract.*—If the Company fail, for a period extending over six months, to observe its obligations, the Government may determine the contract and call upon the Company to restore the land, &c., made over to it. The Government has the option of purchasing the railway, and its rolling-stock and other equipments and property of the Company, on the 5th February 1921, or at intervals of ten years thereafter, on giving one year's notice and paying 20 per cent in excess of the value of the property as a dividend-paying investment.

(vii) *Power of the Company to surrender contract.*—Nil.

(viii) *Term of contract* [*if not determined under* (vi) *or* (vii)].—None specified.

Statistics of working (Those for the periods prior to 1908 will be found in Appendix 38 to the Railway Administration Report for 1907).—

Year.	Mileage open at end of each year.	Total capital outlay, including suspense, to end of each year, *i.e.*, outlay on (i) lines open, and (ii) lines partly or wholly under construction.	Gross earnings.	Net earnings.	Percentage of net earnings on total capital outlay given in column (3).	Subsidy from local Government.	Total income.	Percentage of total income on total capital outlay given in column (3).	Earnings per mile per week.	Proportion of expenses to earnings.
1	2	3	4	5	6	7	8	9	10	11
	Miles	Rs.	Rs.	Rs.		Rs.	Rs.		Rs.	
1908 .	77·50	93,24,383	10,24,770	4,47,121	4·80	...	4,47,121	4·80	254	56·37
1909 .	77·50	95,64,604	11,09,679	4,84,171	5·06	...	4,84,171	5·06	275	56 37
1910 .	86·02	97,16,646	11,20,604	4,46,417	4·59	...	4,46,417	4 59	278	60·16
1911 .	86·02	1,03,06,044	11,88,873	4,30,708	4·18	5,112	4,35,820	4·23	266	63·77
1912	86 02	1,06,29,497	13,08,470	5,61,887	5·29	5,112	5,66,999	5·33	293	57·06
1st qr. of 1913.	86·02	1,06,58,110	3,57,078	1,58,859	1·49	...	1,58,859	1·49	319	55·51
1913-14 .	86·02	1,09,70,066	13.54,970	6.03,160	5 50	5,112	6.08,272	5·54	303	55·49
1914-15 .	86·02	1,11,66,228	12.92,241	4,88,264	4·37	5,112	4,93,376	4·42	289	62·21
1915-16 .	86·02	1,14,19,380	14,18,609	5,51,050	4·83	5,112	5,56,162	4·87	317	61·16
1916-17 .	86·02	1,16,14 769	14,26,539	5,57,813	4·81	5,112	5,62,925	4·85	319	60·90
1917-18 .	86.02	1,17,38,173	14,40,889	5,00,091	4·26	5,112	5,05,203	4·34	322	65·29

Ledo and Tikak-Margherita Colliery railway (3′ 3⅜″ gauge)—

This line was constructed by the Assam Railways and Trading Company in 1883, under the sanction of a concession granted in an Indenture made with the Secretary of State on the 30th July 1881, and was used originally only for the purpose of bringing coal from the mines on the south bank of the Dihing river to connect with the Dibru-Sadiya railway. It was constituted a railway and its working was taken over by the Dibru-Sadiya railway from the 1st January 1897.

Progress in opening—

Section of railway.	Date of opening.	Miles.	Total.
1	2	3	4
Dihing bridge to Ledo	17-2-84	5·50	5·50

Details of construction—

Permanent-way.—The line is laid with 50-lb. flat-footed steel rails on uriam sleepers.

Ballast.—The line is ballasted with broken stone.

Fencing.—The line is unfenced.

Curves.—The sharpest curve is of 800 feet radius.

Gradients.—The ruling gradient is 1 in 100.

DIBRU-SADIYA RAILWAY SYSTEM—*concld.*

Ledo and Tikak-Margherita Colliery railway (3′ 3⅜″ gauge)—*concld.*

Contract—

Letter, *from the Government of India* in the Public Works Department, No. 623 R.T., dated the 6th August 1896, as to the carriage of goods over the Company's Colliery line and for the through booking of the same with stations on the Dibru-Sadiya railway.

Resolution by the *Government of India* in the Public Works Department, No. 234 R.T., dated the 11th March 1897, as to the application of the general rules for working open lines of railway to the Company's Colliery line.

Contract, dated the 26th February 1903, *between the Secretary of State and the Assam Railways and Trading Company*, as to the grant of a new lease to the Company for working the coal mines in the Makum coal-fields for a period of 30 years from the 30th July 1901 and for the exercise of the privileges granted in connection therewith.

Main provisions of contract—

(i) *Land.*—Mines and premises leased to the Company at a fixed half-yearly rental, or in lieu of such rent a certain royalty on the out-put of coal.

(ii) *Government aid.*—Nil.

(iii) *Terms of working.*—All charges for working the open line system are divided between the Dibru-Sadiya railway and the Colliery branch in proportion to their respective gross earnings. For hire of rolling-stock provided by the Dibru-Sadiya railway, 5 per cent of gross earnings are charged to the Colliery.

(iv) *Rates and fares.*—Certain station to station goods rates have been approved in the Government of India letter noted above.

(v) *Special obligations as to the conveyance of.*—

(*a*) Mails, troops, police, high Government officials and Government stores.—
(*b*) Government bullion and coin, and the persons in charge thereof.— } Not specified.

(vi) *Power of the Government to determine contract.*—The Government may determine the contract and take possession of the mines if the Company fail to fulfil its obligations. On the termination of the contract the Government may purchase buildings and works at a fair valuation.

(vii) *Power of the Company to determine contract.*—The Company may determine the contract if the mines become destroyed or are rendered unfit through any extraordinary casualty. On the termination of the contract the Company is to take away all machinery, etc., belonging to the mines and the railways or tramways constructed for the purpose of working the mines, unless the Government shall be willing to purchase the same.

(viii) *Power of the Company to surrender contract.*—Nil.

(ix) *Term of contract.*—30 years from 30th July 1901.

Statistics of working (Those for the periods prior to 1908 will be found in Appendix 38 to the Railway Administration Report for 1907).—

Year.	Mileage open at end of each year.	Total capital outlay, including suspense, to end of each year, *i.e.*, outlay on (i) lines open, and (ii) lines partly or wholly under construction.	Gross earnings.	Net earnings.	Percentage of net earnings on total capital outlay given in column (3).	Earnings per mile per week.	Proportion of expenses to earnings.
1	2	3	4	5	6	7	8
	Miles.	Rs.	Rs.	Rs.		Rs.	
1908	8·50	16,94,069	69,175	30,486	1·80	156	55·93
1909	5·50	16,94,069	79,905	34,891	2·06	219	56·33
1910	5·50	16,94,069	80,288	32,441	1·91	281	59·61
1911	5·50	16,94,069	83,118	30,429	1·80	291	63·39
1912	5·50	16,94,069	96,954	41,957	2·48	339	56·72
1st qr. of 1913	5·50	16,94,069	22,965	10,138	0·60	321	55·86
1913-14	5·50	16,94,069	92,068	40,821	2·41	322	55·66
1914-15	5·50	16,94,069	99,609	38,190	2·25	348	61·65
1915-16	5·50	16,94,069	96,680	37,755	2·23	338	60·95
1916-17	5·50	16,94,069	94,080	36,149	2·13	329	61·53
1917-18	5·50	16,94,069	94,876	32,856	1·94	332	65·37

GONDAL-PORBANDAR STATE RAILWAY SYSTEM.

Lines comprised in the system.—The Gondal-Porbandar State railway system is made up of—

	Open line. Miles.
(*a*) Gondal-Porbandar State railway (3′ 3⅜″ gauge)	148·01
(*b*) Jetalsar-Rajkot railway (3′ 3⅜″ gauge)	46·21
(*c*) Khijadiya-Dhari railway (3′ 3⅜″ gauge)	37·22
Total	231·44

Gondal-Porbandar State railway (3′ 3⅜″ gauge)—

This line was constructed by Government agency for the Native States of Gondal and Porbandar (after which it is named). It was worked up to the 31st March 1911 by an Administrative Coalition of the States of Bhavnagar, Gondal, Junagad and Porbandar, which was formed for the purpose of working as one undertaking the railways which, prior to that date, were comprised in the Bhavnagar-Gondal-Junagad-Porbandar railway system. The Coalition ceased to exist on the 1st April 1911, on and from which date the line is being worked independently as a separate railway by the Coalition of the Gondal and Porbandar States.

Progress in opening—

Sections of railway.	Date of opening.	Miles.	Total.	Grand total.	Remarks.
1	2	3	4	5	6
Main line—					
Dhasa to Dhoraji	19-1-81	73·69			
Dhoraji to Porbandar	1-10-89	69·07			
Porbandar to Porbandar Bandar	15-3-90	*1·55			*Is worked for goods traffic only.
			144·31		
Quarry branch—					
Ranawao to Quarry	17-12-89	*3·70			
			3·70		
TOTAL	...	...	...	148·01	

Details of construction—

Permanent-way.—The permanent-way consists of 41¼-lb. flat-footed steel rails on creosoted pine, deodar, jodka, teak and steel peapod sleepers.

Ballast.—The line is ballasted with broken stone.

Fencing.—The line is practically unfenced.

Curves.—The sharpest curve is of 716 feet radius.

Gradients.—The ruling gradient is 1 in 200, except on Ranawao quarry line where it is 1 in 67.

Agreement—

Nil.—The line is owned and worked by the Gondal and Porbandar States.

Statistics of working—

Year.	Mileage open at end of each year.	Total capital outlay, including suspense, to end of each year, *i.e.*, outlay on (i) lines open and (ii) lines partly or wholly under construction.*	Gross earnings.	Net earnings.	Percentage of net earnings on total capital outlay given in column (3).	Earnings per mile per week.	Proportion of expenses to earnings.
1	2	3	4	5	6	7	8
	Miles.	Rs.	Rs.	Rs.		Rs.	
1911	148·01	66,86,312	9,14,280	4,84,616	6·92	119	46·99
1912	148·01	68,02,518	8,94,139	4,46,293	6·22	116	50·09
1st qr. of 1913	148·01	68,91,364	3,01,847	1,83,937	10·08	157	39·06
1913-14	148·01	71,22,318	9,85,264	5,15,819	6·86	128	47·65
1914-15	148·01	72,52,416	9,65,145	4,40,435	5·73	125	54·37
1915-16	148·01	73,77,802	10,18,762	5,32,081	6·84	132	47·77
1916-17	148·01	74,77,144	10,41,068	4,80,728	6·08	135	53·82
1917-18	148·01	76,47,747	11,96,312	5,77,924	7·13	155	51·69

* Excluding outlay on the lines, Porbandar to Porbandar Bandar and Ranawao to quarry.

Jetalsar-Rajkot railway (3′ 3⅜″ gauge).—

This line was constructed and was, up to the 31st March 1911, worked by an Administrative Coalition of the States of Bhavnagar, Gondal, Junagad and Porbandar, which was formed for the purpose of working as one undertaking the railways which, prior to that date, were comprised in the Bhavnagar-Gondal-Junagad-Porbandar railway system. The Coalition ceased to exist on the 1st April 1911, on and from which date the line is being worked by the Administration of the Gondal-Porbandar State railway.

Progress in opening—

Section of railway.	Date of opening.	Miles.	Total
1	2	3	4
Jetalsar to Rajkot Junction	12-4-93	46·21	46·21

GONDAL-PORBANDAR STATE RAILWAY SYSTEM—*contd.*

Jetalsar-Rajkot railway (3′ 3⅜″ gauge)—*concld.*

Details of construction—

Permanent-way.—The permanent-way consists of 41½-lb. flat-footed steel rails on creosoted pine, deodar and jodka teak sleepers, except for five miles where the rails are laid on steel trough sleepers.

Ballast.—The ballast used is of broken stone.

Fencing.—The line is unfenced except between Rajkot Para and Rajkot Junction.

Curves.—The sharpest curve is of 955 feet radius.

Gradients.—The ruling gradient is 1 in 175.

Agreement—

Memorandum of conditions for separate working, from 1st April 1911, of the Kathiawar railways sanctioned in the Government of India, Foreign Department, letter No. 431-I.B., dated the 23rd February 1911, to the address of the Secretary to the Government of Bombay, Political Department.

Terms and conditions, dated the 14th December 1913, prescribed by the Railway Board, as to the maintenance, management and working of the Jetalsar-Rajkot railway.

Main provisions of agreement—

(i) *Land.*—Provided, at the cost of capital, by the Native States through whose territories the line passes.

(ii) *Government aid.*—Nil. The line is the property of the States of Junagad, Gondal and Rajkot and the Talukdar of Jetpur, who supply funds for any necessary additions thereto chargeable to the capital account. It is maintained and worked by the agency of the Gondal-Porbandar State railway, which provides the rolling-stock and other appliances, etc., necessary thereunto.

(iii) *Terms of working.*—
(iv) *Distribution of profits.*— } 40* per cent of gross earnings (subject to a biennial revision) are retained by the working agency, *plus* actual expenditure on maintenance of way works and stations, police charges, and 5 per cent of gross earnings for hire of rolling-stock supplied by the working agency.

* 35 per cent in those half-years in which the gross earnings per mile per week exceed Rs. 50.

(v) *Rates and fares.*—
(vi) *Special obligations as to the conveyance of.*— } The same as those in force on the Gondal-Porbandar State railway.
(a) Troops, police, high Government officials and stores.—
(b) Bullion and coin.—

(vii) *Power of the Government to determine agreement.*—The Railway Board shall exercise the powers of an arbitrator.

(viii) *Power of the Proprietors to determine agreement.*—Nil.

(ix) *Term of agreement.*—None specified.

Statistics of working (Those for the periods prior to 1908 will be found in Appendix 38 to the Railway Administration Report for 1907)—

Year.	Mileage open at end of each year.	Total capital outlay, including suspense, to end of each year, *i.e.*, outlay on (i) lines open and (ii) lines partly or wholly under construction.	Gross earnings.	Net earnings.	Percentage of net earnings on total capital outlay given in column (3).	Earnings per mile per week.	Proportion of expenses to earnings.
1	2	3	4	5	6	7	8
	Miles.	Rs.	Rs.	Rs.		Rs.	
1908	46·21	16,00,937	2,49,957	1,11,178	6·94	104	55·52
1909	46·21	16,03,140	2,44,704	1,01,808	6·35	102	58·29
1910	46·21	16,13,883	2,74,868	1,24,701	7·72	114	54·63
1911	46·21	16,13,639	2,92,000	1,29,680	8·04	122	55·59
1912	46·21	16,14,853	3,51,069	1,82,072	11·27	146	48·14
1st qr of 1913	46·21	16,18,950	1,11,588	62,961	15·56	186	43·58
1913-14	46·21	16,20,100	4,07,551	2,18,847	13·51	170	46·30
1914-15	46·21	16,26,937	4,09,160	2,11,178	12·98	170	48·39
1915-16	46·21	16,33,978	4,40,225	2,31,636	14·18	183	47·38
1916-17	46 21	16 33,978	4,79,142	2,30,053	14·08	199	51·99
1917-18	46·21	16,53,255	5,19,197	2,70,782	16·38	216	47·85

GONDAL-PORBANDAR STATE RAIL WAY SYSTEM—*concld.*

Khijadia-Dhari railway (3′ 3⅜″ gauge)—

The construction of this line by the Baroda Durbar was sanctioned by the Secretary of State for India in his despatch No. 16 Railway, dated the 7th February 1913.

Progress in opening—

Sections of railway.	Date of opening.	Miles.	Total.
1	2	3	4
Khijadia to Gavadka	1-3-13	16·39	
Gavadka to Chalala	10-3-14	9·14	
Chalala to Dhari	27-5-16	11·69	
TOTAL	...	...	37 22

Details of construction—

Permanent-way.—The permanent-way consists of 41¼-lb flat-footed steel rails laid on jarrah sleepers.
Ballast.—The line is ballasted with moorum.
Fencing.—The station platforms only are fenced.
Curves.—The sharpest curve has a radius of 2,865 feet.
Gradients.—The ruling gradient is 1 in 200.

Agreement—

The line was constructed by the Baroda Durbar at its own cost and made over to the Gondal-Porbandar State railway for working from 1st March 1913 under the following terms:—

Main provisions of agreement—

(i) *Land.*—Provided at the cost of capital.

(ii) *Government aid.*—Nil. The line is the property of the Baroda Durbar and is worked by the Gondal-Porbandar State railway.

(iii) *Terms of working.*—40* per cent of gross earnings (subject to a biennial revision) are retained by the working agency, *plus* actual expenditure on maintenance of way, works and stations, police charges, interest and maintenance charges of the joint works and joint station expenses at Khijadia Junction and 5 per cent of gross earnings for hire of rolling-stock supplied by the working agency.

* Reduced to 35 per cent in those half-years in which the gross earnings per mile per week exceed Rs. 50.

(iv) *Distribution of profits.*—The whole of the net earnings are paid over to the Baroda Durbar.

(v) *Rates and fares.*—
(vi) *Special obligations as to the conveyance of.*—
(*a*) Mails, troops, police, high Government officials and Government stores.—
(*b*) Government bullion and coin, and the persons in charge thereof.—
} The same as those in force on the Gondal-Porbandar State railway.

(vii) *Power of the Government to determine agreement.*—
(viii) *Power of the Proprietors to determine agreement.*—
} Nil.

(ix) *Term of agreement.*—5 years from 22nd May 1913.

Statistics of working—

Year	Mileage open at end of each year.	Total capital outlay, including suspense, to end of each year, *i.e.*, outlay on (i) lines open and (ii) lines partly or wholly under construction.	Gross earnings.	Net earnings.	Percentage of net earnings on total capital out lay given in column (3).	Earnings per mile per week.	Proportion of expenses to earnings.
1	2	3	4	5	6	7	8
	Miles.	Rs.		Rs.		Rs.	
1st qr. of 1913	16·39	9,25,655	1,000	650†	0·28	15	35·00
1913-14	25·53	13,65,967	28,940	14,940†	1·09	33	48·38
1914-15	25·53	16,64,256	49,441	23,550	1·42	37	52·34
1915-16	25·53	19,12,637	47,522	2,710	0·14	36	94·30
1916-17	37·22	19,55,078	69,132	18,420	0·94	38	73·36
1917-18	37·22	19,54,370	82,997	13,013	0·67	43	83.24

†Excluding expenses on maintenance of way, works and stations borne directly by the Baroda Durbar in its capital accounts.

JAMNAGAR RAILWAY (3′ 3⅜″ gauge).

This line was constructed for the Navanagar State and was, up to the 31st March 1911, worked by an Administrative Coalition of the States of Bhavnagar, Gondal, Junagad and Porbandar, which was formed for the purpose of working as one undertaking the railways which, prior to that date, were comprised in the Bhavnagar-Gondal-Junagad-Porbandar railway. The Coalition ceased to exist on the 1st April 1911, on and from which date the line is being worked independently as a separate railway.

Progress in opening—

Sections of railway.	Date of opening.	Miles.	Total.	Remarks.
1	2	3	4	5
Rajkot Junction to Jamnagar	8-4-97	50·29		
Jamnagar to Bedi Bandar	8-4-97	*3·93		*Worked for goods traffic only.
TOTAL	...	...	54·22	

Details of construction—

Permanent-way.—The permanent-way consists of 41¼-lb. flat-footed steel rails on creosoted pine, deodar and jodka teak sleepers.

Ballast.—The ballast used is of broken stone.

Fencing.—The line is unfenced, except at the approaches to the Victoria bridge near Jamnagar and to the south of the Jamnagar station yard.

Curves.—The sharpest curve is of 1,000 feet radius.

Gradients.—The ruling gradient is 1 in 200.

Agreement—

Nil.—The line is owned and worked by the Navanagar State.

Statistics of working (Those for the periods prior to 1908 will be found in Appendix 38 to the Railway Administration Report for 1907.)—

Year.	Mileage open at end of each year.	Total capital outlay, including suspense, to end of each year, *i.e.*, outlay on (*i*) lines open and (*ii*) lines partly or wholly under construction.	Gross earnings.	Net earnings.	Percentage of net earnings on total capital outlay given in column(3).	Earnings per mile per week.	Proportion of expenses to earnings.
1	2	3	4	5	6	7	8
	Miles.	Rs.	Rs.	Rs.		Rs.	
1908	54·22	23,26,945	2,36,715	1,24,911	5·37	84	47·23
1909	54·22	23,24,854	2,37,240	1,15,995	4·99	84	51·11
1910	54·22	23,32,069	2,44,143	1,20,318	5·16	87	50·72
1911	54·22	23,27,124	2,45,850	1,17,260	5·04	87	52·30
1912	54·22	23,35.655	2,38,486	98,643	4·22	85	58·64
1st qr. of 1913	54·22	23,53,625	78,911	41,274	1·75	112	47·70
1913-14	54·22	23.53.951	2,91,782	1,55,756	6 62	103	46·62
1914-15	54·22	23.70,800	3,01.245	1,00,605	4·62	107	63·62
1915-16	54·22	23,96 173	3,23,354	1,45,755	6·08	115	54·92
1916-17	54·22	24,08,946	3,43,360	1,46,315	6·07	122	57·39
1917-18	54·22	24,25,901	3,74,024	1,76,505	7·28	133	52·81

JODHPUR-BIKANER RAILWAY SYSTEM.

Lines comprised in the system.—The Jodhpur-Bikaner railway system is made up of—

	Open line.	Under construction or sanctioned for construction.	Total.
	Miles.	Miles.	Miles.
(*a*) Jodhpur-Bikaner railway (Jodhpur section) (3′ 3⅜″ gauge)	608·75	77·83	686·58
(*b*) Jodhpur-Bikaner railway (Bikaner section) (3′ 3⅜″ gauge)	497·66	132·03	629·69
(*c*) Jodhpur-Hyderabad railway (British section) (3′ 3⅜″ gauge)	123·98	...	123·98
(*d*) Mirpur Khas-Jhudo railway (3′ 3⅜″ gauge)	50·43	...	50·43
(*e*) Mirpur Khas-Khadro railway (3′ 3⅜″ gauge)	49·50	...	49·50
(*f*) Pipar-Bilara Light railway (2′ 0″ gauge)	25·25	...	25·25
Total	1,355·57	209·86	1,565·43

Jodhpur-Bikaner railway (Jodhpur section) (3′ 3⅜″ gauge)—

Progress in opening—

Sections of railway.	Date of opening.	Miles.	Total.	Grand total.
1	2	3	4	5
Main line—				
Kuchaman Road to Merta Road	13-3-93	73·00		
Merta Road to Jodhpur	8-4-91	64·00		
Jodhpur to Luni Junction	9-3-85	20·00		
Luni Junction to Balotra	22-3-87	50·00		
Balotra to Barmer	15-5-99	60·00		
Barmer to the Jodhpur Frontier	22-12-00	74·44		
			341·44	
Branches and extensions—				
Pachpadra branch—				
Balotra to Pachpadra	22-3-87	10·00		
			10·00	
Marwar Railway Junction extension—				
Luni Junction to Marwar Pali	17-6-84	25·00		
Marwar Pali to Marwar Railway Junction	27-7-82	19·00		
			44·00	
Phalodi branch—				
Jodhpur to Osian	21-9-13	34·28		
Osian to Marwar Lohawat	17-3-14	27·22		
Marwar Lohawat to Phalodi	12-5-14	17·69		
			79·19	
Merta City branch—				
Merta Road to Merta City	18-1-05	8·95		
			8·95	
Bhagu extension—				
Merta Road to Nagaur	16-10-91	35·00		
Nagaur to Bhagu	9-12-91	24·50		
			59·50	
Marwar Frontier extension—				
Degana to Marwar Frontier	16-9-09	61·11		
			61·11	
Ladnu Extension—				
Jaswantgarh to Ladnu	20-12-15	4·56	4·56	
TOTAL OPEN MILEAGE	...	...	...	608·75
UNDER CONSTRUCTION OR SANCTIONED FOR CONSTRUCTION—				
Marwar Junction to Sanderao (sanctioned on 10th July 1914).	...	77·83	77·83	77·83
GRAND TOTAL	...	...	...	686·58

Details of construction—

Permanent-way.—About 11 miles of the line are laid with 36-lb. flat-footed iron rails, 189 miles with 36-lb. 45 miles with 41¼-lb. and 363 miles with 50-lb. flat-footed steel rails. The sleepers are steel trough, deodar, sâl, maiyang and creosoted pine.

Ballast.—On the greater portion of the line the ballast consists of coarse sand, kunkur and broken stone.

Fencing.—With the exception of a few stations, the line is unfenced.

Curves.—There are no curves with a radius of less than 1,000 feet.

Gradients.—The ruling gradient is 1 in 150, except at mile 0-1 on the Phalodi branch where the steepest gradient is 1 in 130.

JODHPUR-BIKANER RAILWAY SYSTEM—*contd.*

Jodhpur-Bikaner railway (Jodhpur section) (3′ 3⅜″ gauge)—*concld.*

Agreements—

Dated the 13th July 1889 } *between the Government of India and the Bikaner and Jodhpur Durbars,*
Dated the 30th July 1889 } *respectively,* as to the construction (at the cost of the two Durbars for the portions in their respective territories), management, maintenance and working of the Jodhpur-Bikaner railway.

Dated the 22nd December 1900, *between the Government of India and His Highness the Maharaja of Jodhpur and the Council of Regency, Bikaner,* as to the construction (at the cost of the Jodhpur Durbar and of the Government of India for the portions in their respective territories) of a railway from Balotra to Hyderabad, and for the management, maintenance and working thereof by the Jodhpur-Bikaner railway, as modified by—

Letter *from the Government of India in the Public Works Department, to the Agent to the Governor General for Rajputana,* No. 255 R.T., dated the 6th March 1900, and the reply thereto;

Letter *from the Railway Board to the Agent to the Governor General for Rajputana,* No. 1537 R.T., dated the 20th August 1908; and

Letter *from the Railway Board to the Agent to the Governor General for Rajputana,* No. 2197 R.S., dated the 26th October 1908, and the reply thereto.

Main provisions of agreements—

(i) *Land.*—Provided free of cost—that in Jodhpur territory by the Jodhpur Durbar and that in Bikaner territory by the Bikaner Durbar.

(ii) *Government aid.*—Nil. The Jodhpur-Bikaner railway is the exclusive property of the two Native States—the portion in Jodhpur territory belonging to the Jodhpur Durbar, that in Bikaner territory to the Bikaner Durbar—each of which provides the funds requisite for its own line.

(iii) *Distribution of profits.*—Each of the two Durbars receives all the profits derived from the working of the portion of the line situated in its territory.

(iv) *Rates and fares.*—Certain maxima and minima have been fixed, between the limits of which the Railway Administration can vary the rates and fares quoted for goods and coaching traffic.

(v) *Special obligations as to the conveyance of—*
(*a*) Mails, troops, police, high Government officials and Government stores.
(*b*) Government bullion and coin, and the persons in charge thereof.
} Not specified; but certain rates and fares were approved by executive orders of the Durbars.

(vi) *Power of the Government to determine agreements.*
(vii) *Power of the Durbars to determine agreements.*
} None specified.
(viii) *Term of agreements.*—

Statistics of working (Those for the periods prior to 1908 will be found in Appendix 38 to the Railway ministration Report for 1907.)

Year.	Mileage open at end of each year.	Total capital outlay, including suspense, to end of each year, *i.e.*, outlay on (i) lines open and (ii) lines partly or wholly under construction.	Gross earnings.	Net earnings.	Percentage of net earnings on total capital outlay given in column (3).	Earnings per mile per week.	Proportion of expenses to earnings.
1	2	3	4	5	6	7	8
	Miles.	Rs.	Rs.	Rs.		Rs.	
1908	463·89	1,42,85,467	19,28,235	8,65,023	6·06	80	55·14
1909	525·00	1,43,06,908	21,10,217	10,19,529	7·13	77	51·69
1910	525·00	1,44,92,736	26,90,468	15,49,703	10·69	99	42·40
1911	525·00	1,47,54,392	35,13,004	20,39,445	13·82	129	41·93
1912	525·00	1,62,57,742	38,58,597	21,32,276	13·12	141	44·74
1st qr. of 1913	525·00	1,69,58,945	8,56,544	5,09,800	3·01	126	40·48
1913-14	586·50	1,84,49,723	35,84,107	17,48,754	9·48	118	51·21
1914-15	604·19	1,95,50,053	30,69,518	14,66,772	7·50	98	52·21
1915-16	608·75	1,99,91,257	44,82,377	26,14,214	13·08	142	41·68
1916-17	608·75	2,04,66,528	45,70,060	24,73,885	12·09	144	45·87
1917-18	608·75	2,04,44,558	55,58,464	32,85,831	16·07	176	40·89

JODHPUR-BIKANER RAILWAY SYSTEM—*contd.*

Jodhpur-Bikaner railway (Bikaner section) (3′ 3⅜″ gauge)—

Progress in opening—

Sections of railway.	Date of opening.	Miles.	Total.	Grand total.
1	2	3	4	5
Main line—				
Bhagu to Bikaner	9-12-91	47·60		
Bikaner to Dulmera	2-6-98	42·00		
Dulmera to Lunkransar	1-1-01	8·32		
Lunkransar to Suratgarh	1-1-01	63·53		
Suratgarh to Bhatinda	9-9-02	88·00		
			249·45	
Hissar Extension—				
Manwar Frontier to Sujangarh	16-9-09	1·42		
Sujangarh to Ratangarh	2-2-10	28·56		
Ratangarh to Churu	22-5-10	26·61		
Churu to Hissar	8-7-11	79·36		
			135·95	
Bikaner-Ratangarh Chord—				
Bikaner to Ratangarh	24-11-12	84·97		
			84·97	
Sardarshahr extension—				
Hudera (2 miles from Ratangarh) to Sardarshahr	1-3-16	27·29	27·29	
TOTAL OPEN MILEAGE	...	...	...	497·66
UNDER CONSTRUCTION OR SANCTIONED FOR CONSTRUCTION—				
Hanumangarh to Sadulpur } Sanctioned on 22nd	...	105·00		
Bikaner to Kolayat } October 1915.	...	27·03		
			132·03	
				132·03
GRAND TOTAL	...	...	...	629·69

Details of construction—

Permanent-way.—The permanent-way consists of flat-footed steel rails of 50 lbs. per yard for about 263 miles, 41¼ lbs. per yard for about 5 miles, and 36 lbs. per yard for 230 miles laid on steel trough, deodar and sâl sleepers.

Ballast.—The ballast consists of coarse sand and small kunkur, except on the Suratgarh-Bhatinda section where it is broken brick and kunkur.

Fencing.—The line is unfenced, except at a few stations.

Curves.—The sharpest curve is of 95·5 feet radius.

Gradients.—The ruling gradient is 1 in 150.

Agreements—

Main provisions of agreements— } As noted under Jodhpur-Bikaner railway (Jodhpur section).

Statistics of working (Those for the periods prior to 1908 will be found in Appendix 38 to the Railway Administration Report for 1907.)

Year.	Mileage open at end of each year.	Total capital outlay, including suspense, to end of each year, *i.e.*, outlay on (i) lines open and (ii) lines partly or wholly under construction.	Gross earnings.	Net earnings.	Percentage of net earnings on total capital outlay given in column (3).	Earnings per mile per week.	Proportion of expenses to earnings.
1	2	3	4	5	6	7	8
	Miles.	Rs.	Rs.	Rs.		Rs.	
1908	245·35	75,07,922	7,74,785	3,49,359	4·66	61	54·84
1909	251·35	75,86,367	7,82,156	3,16,844	4·20	60	59·49
1910	306·04	82,04,896	10,61,570	6,07,372	7·40	67	42·79
1911	385·40	97,82,232	14,03,926	8,18,468	8·37	70	41·70
1912	470·37	1,06,06,934	16,53,041	8,58,360	8·09	68	48·07
1st qr. of 1913	470·37	1,07,55,915	5,30,710	3,16,338	2·94	87	40·39
1913-14	470·37	1,10,31,983	18,72,383	9,71,270	8·80	77	48·13
1914-15	470·37	1,17,65,712	17,65,677	8,82,773	7·50	72	50·00
1915-16	497·66	1,21,34,077	21,46,094	10,51,032	8·66	83	51·03
1916-17	497·66	1,20,57,874	19,14,090	8,49,179	7·04	74	55·64
1917-18	497·66	1,21,04,054	18,39,443	10,18,736	8·42	71	44·62

JODHPUR-BIKANER RAILWAY SYSTEM—*contd.*

Jodhpur-Hyderabad railway (British section) (3′ 3⅜″ gauge)—

Progress in opening—

Sections of railway.	Date of opening.	Miles.	Total.	Remarks.
1	2	3	4	5
Hyderabad to Shadipalli	18-8-92	55·49		The line from Hyderabad to Shadipalli was originally on the 5′ 6″ gauge but was converted to and opened on the 3′ 3⅜″ gauge on the 20th October 1901.
Shadipalli to the Jodhpur Frontier . . .	22-12-00	68·49		
Total . .	...	...	123·98	

Details of construction—

Permanent-way.—The section is laid with 50-lb. flat-footed steel rails on deodar creosoted pine, sâl, jarrah and maiyang sleepers.

Ballast.—The ballast is of kunkur, stone and broken brick.

Fencing.—With the exception of a few stations and about 34 miles, between Shadipalli and Chhor, the line is unfenced.

Curves.—There are no curves with a radius of less than 1,000 feet.

Gradients.—The ruling gradient is 1 in 150.

Agreement and contracts—

Agreement, dated the 22nd December 1900, *between the Government of India and His Highness the Maharaja of Jodhpur and the Council of Regency, Bikaner*, as to the construction (at the cost of the Jodhpur Durbar and of the Government of India for the portions in their respective territories), of a railway from Balotra to Hyderabad, and for the management, maintenance and working thereof by the Jodhpur-Bikaner Railway Administration, as modified by—

Letter *from the Government of India in the Public Works Department, to the Agent to the Governor General for Rajputana*, No. 255 R.T., dated the 6th March 1900, and the reply thereto;

Letter *from the Railway Board to the Agent to the Governor General for Rajputana*, No. 1537 R.T., dated the 20th August 1908; and

Letter *from the Railway Board to the Agent to the Governor General for Rajputana*, No. 2197 R.S., dated the 26th October 1908, and the reply thereto.

Contract, dated the 13th July 1911, *between the Secretary of State and the Sind Light Railways, Limited*, as to the construction, management, maintenance and working, by the Administration of the Jodhpur-Bikaner railway (or any State, or other agency), of the Mirpur Khas-Jhudo railway.

Contract, dated the 16th September 1912, *between the Secretary of State and Their Highnesses the Maharojas of Jodhpur and Bikaner*, as to the management, maintenance and working, by the Administration of the Jodhpur-Bikaner railway, of the Mirpur Khas-Jhudo railway.

Main provisions of agreement and contracts—

(i) *Land.*—Provided by the Government at the cost of capital.

(ii) *Government aid.*—The line is the property of the Government, who provide all expenditure for capital, and is managed, maintained, stocked and worked by the Administration of the Jodhpur-Bikaner railway as part of that system.

(iii) *Terms of working.*—The working expenses of the amalgamated undertaking, excluding the cost of maintenance (but including rent of joint works and interest at 4½ per cent on funds provided for the purchase of stores required for the maintenance and working of the combined undertakings are divided, in the ratio of the gross earnings of each, between the British and Native State sections. Maintenance charges are the actual expenditure on each section for *direct* charges; and for *joint* charges such as the salary, allowances and other expenses of the Chief Engineer, the proportion due in the ratio of the gross earnings. In addition to the working expenses mentioned above, the Government pay to the Jodhpur and Bikaner Durbars in each half-year for the provision of rolling-stock a sum equal to 5 per cent of the share of the cost of the whole of the joint-stock of the system which is attributable to the Jodhpur-Hyderabad railway—the book value of the stock being divided between the several sections of the system in proportion to the gross earnings of each for the period, for the purpose of determining the amount on which the percentage shall be made. The charge for the stock which cannot be considered as joint (*i.e.*, the stock which does not ply on each section nor is profit earning) shall be 5 per cent on the cost divided between the sections using it in proportion to the mileage on which it runs on each section.

JODHPUR-BIKANER RAILWAY SYSTEM—*contd.*

Jodhpur-Hyderabad railway (British section) (3′ 3⅜″ gauge)—*concld.*

Main provisions of agreement and contracts—*concld.*

(iv) *Distribution of profits.*—After payment of the working expenses indicated under (iii), the balance of the gross earnings, if any, is paid to the British Government.

(v) *Rates and fares.*—Certain maxima and minima have been fixed, between the limits of which the Railway Administration can vary the rates and fares quoted for goods and coaching traffic.

(vi) *Special obligations as to the conveyance of.*—

(*a*) Mails, troops, police, high Government officials and Government stores.
(*b*) Government bullion and coin, and the persons in charge thereof.
} To be conveyed on the same conditions and at the same rates as may be in force from time to time on other railways of the same gauge belonging to the Government of India.

(vii) *Power of the Government to determine agreement.*—
(viii) *Power of the Durbars to surrender agreement.*—
(ix) *Term of agreement.*—
} The agreement is terminable, only on the 1st April or the 1st October in any year, on 12 months' notice given by either party to the other.

Statistics of working (Those for the periods prior to 1902 will be found in Appendix 38 to the Railway Administration Report for 1907.)

Year.	Mileage open at end of each year.	Total capital outlay, including suspense, to end of each year, *i.e.*, outlay on (i) lines open and (ii) lines partly or wholly under construction.	Gross earnings.	Net earnings.	Percentage of net earnings on total capital outlay given in column (3).	Interest.	Gain or loss to the State *pertaining to each year.*	Earnings per mile per week.	Proportion of expenses to earnings.
1	2	3	4	5	6	7	8	9	10
	Miles.	Rs.	Rs.	Rs.		Rs.	Rs.	Rs.	
1902 . .	123·98	40,45,972	5,04,008	2,18,814	5·41	1,59,771	+59,043	78	56·59
1903 . .	123·98	40,45,338	5,84,094	2,62,379	6·49	1,60,179	+1,02,200	91	55·08
1904 . .	123·98	39,58,081	6,48,728	3,45,007	8·72	1,54,846	+1,90,161	101	46·82
1905 . .	123·98	39,67,948	7,23,989	3,69,002	9·30	1,58,622	+2,10,380	112	49·03
1906 . .	123·98	40,70,635	8,91,456	5,11,938	12·58	1,57,778	+3,54,160	138	42·57
1907 . .	123·98	40,23,073	8,05,017	3,57,918	8·90	1,21,968	+2,35,950	125	55·54
1908 . .	123·98	42,81,148	7,59,479	3,34,028	7·80	1,49,807	+1,84,221	118	56·02
1909 . .	123·98	42,93,099	8,19,444	2,69,834	6·28	1,41,400	+1,28,434	127	67·10
1910 .	123·98	42,32,763	9,00,091	3,80,517	8·99	1,42,724	+2,37,793	140	57·72
1911 . .	123·98	42,01,757	12,02,852	6,94,934	16·54	1,42,970	+5,51,964	187	42·23
1912 . .	123·98	42,19,491	13,53,633	6,84,232	16·22	1,46,742	+5,37,490	210	49·45
1st qr. of 1913 .	123·98	42,42,650	3,23,858	1,99,608	4·70	40,484	+1,59,124	201	38·37
1913-14 .	123·98	43,71,962	13,02,806	6,30,706	14·43	1,45 927	+4,84,779	202	51·59
1914-15 .	123·98	44,21,306	9,81,834	3,64,426	8·24	1,53,847	+2,10,579	152	62·88
1915-16 .	123·98	44,45,252	12,72,371	5,98,124	13·46	1,53,946	+4,44,178	197	52·99
1916-17 .	123·98	44,66,489	14,26,998	6,60,256	14·78	1,46 882	+5,13,374	221	53·73
1917-18 .	123·98	45,17,708	20,08,227	11,18,516	24·76	1,56,010	+9,62,506	311	44·30

Mirpur Khas-Jhudo railway (3′ 3⅜″gauge)—

Date of registration of the Company.—14th February 1908.

Progress in opening—

Section of railway.	Date of opening.	Miles.	Total.
1	2	3	4
Jamrao Junction to Jhudo	18-4-09	50·43	50·43

Details of construction—

Permanent-way.—The permanent-way consists of about 33 miles of 36-lb. and about 17 miles of 41¼-lb. flat-footed steel rails laid on deodar sleepers.
Ballast.—The line is not ballasted.
Fencing.—The line is unfenced.
Curves.—The sharpest curve is of 1,206 feet radius.
Gradients.—The ruling gradient is 1 in 150.

JODHPUR-BIKANER RAILWAY SYSTEM—*contd.*

Mirpur Khas-Jhudo railway (3' 3⅜" gauge)—*contd.*

Agreement and contracts—

Agreement, dated the 22nd December 1900, *between the Government of India and His Highness the Maharaja of Jodhpur and the Council of Regency, Bikaner*, as to the construction (at the cost of the Jodhpur Durbar and of the Government of India for the portions in their respective territories) of a railway from Balotra to Hyderabad, and for the management, maintenance and working thereof by the Jodhpur-Bikaner Railway Administration, as modified by—

Letter *from the Government of India in the Public Works Department, to the Agent to the Governor General for Rajputana*, No. 255 R.T., dated the 6th March 1900, and the reply thereto;

Letter *from the Railway Board to the Agent to the Governor General for Rajputana*, No. 1537 R.T., dated the 20th August 1908; and

Letter *from the Railway Board to the Agent to the Governor General for Rajputana*, No. 2197 R.S., dated the 26th October 1908, and the reply thereto.

Contract, dated the 13th July 1911, *between the Secretary of State and the Sind Light Railways, Limited*, as to the construction, management, maintenance and working, by the Administration of the Jodhpur-Bikaner railway (or any State, or other agency) of the Mirpur Khas-Jhudo railway.

Contract, dated the 16th September 1912, *between the Secretary of State and Their Highnesses the Maharajas of Jodhpur and Bikaner*, as to the management, maintenance and working, by the Administration of the Jodhpur-Bikaner railway, of the Mirpur Khas-Jhudo railway.

Contract, dated the 9th June 1913, *between the Secretary of State and the Sind Light Railways, Limited*, as to the construction of the Mirpur Khas-Khadro railway and its maintenance, management and working as a part of the Mirpur Khas-Jhudo railway.

Contract, dated the 5th December 1913, *between the Secretary of State and Their Highnesses the Maharajas of Jodhpur and Bikaner*, as to the maintenance, management and working, by the agency of the Jodhpur-Bikaner Railway Administration, of the Mirpur Khas-Khadro railway as an integral part of the Mirpur Khas-Jhudo railway.

Contract dated the 22nd August 1916, *between the Secretary of State of the 1st part, Sind Light Railways, Limited of the 2nd part, His Highness the Maharaja of Jodhpur of the 3rd part and His Highness the Maharaja of Bikaner of the 4th part*, as to the adoption of financial year and half year as from 1st April 1913.

Main provisions of agreement and contracts.—

(i) *Land.*—Provided by the Government free of cost to the Company, except that the bank constructed by the Jamrao Canal Department, parallel to and alongside the Jamrao Canal, upon which the railway runs for a distance of about 16 miles, remains the property of the Canal Department, subject to the right of the Company to have the said railway running thereon and other provisions relating to the canal and bridges thereover, etc.

(ii) *Government aid.*—The railway is the property of the Sind Light Railways, Limited, at whose cost it was constructed by the Administration of the Jodhpur-Bikaner railway, who manage, maintain, stock and work it, under agreement with the Government, in conjunction with and as part of the British section of the Jodhpur-Hyderabad railway.

(iii) *Terms of working.*—
(iv) *Distribution of profits.*— } As between the Government and the Sind Light Railways, Limited, the Government undertake the management, maintenance, provision of rolling-stock and working, through State, or other, agency (that at present employed being the Administration of the Jodhpur-Bikaner railway), for 40 per cent of the gross earnings of the Mirpur Khas-Jhudo railway; the remainder, being the net earnings of the branch, is paid by the working agency to the Company.

As between the Government and the Administration of the Jodhpur-Bikaner railway, the Company's line is managed, maintained, stocked and worked by the Jodhpur-Bikaner Railway Administration in conjunction with, and as if it had originally been a part of, the British section of the Jodhpur-Hyderabad railway, and were subject to the provisions of the agreement of the 22nd December 1900 so far as they are not inconsistent with the contract of 1911 between the Government and the Company; *provided that the difference* (if any) between the following sums, *viz.*:—

(*a*) the proportion (*viz.*, 60 per cent) of the gross earnings of the Mirpur Khas-Jhudo railway in each half-year payable, under the combined effect of the contracts of 13th July 1911 and 16th September 1912, by the working agency to the Company, and

(*b*) the sum which would have been payable to the Government as the excess of the gross earnings, over working expenses, of the Mirpur Khas-Jhudo railway in terms of the agreement of the 22nd December 1900, if that railway had been originally subject thereto as part of the British section of the Jodhpur-Hyderabad railway and if the gross earnings thereof, ascertained by separate accounts, had been treated as separate from those of the other portion of the Jodhpur-Hyderabad railway so as to bear its own share of working expenses under that agreement in the same half-year, adjusted by payment of such difference by the Government to the Jodhpur-Bikaner Railway Administration or *vice versâ*, as the case may be, according as the sum payable by the Railway Administration to the Company is greater or less than that which would have been payable by the Railway Administration to the Government as stated under (*b*) above.

JODHPUR-BIKANER RAILWAY SYSTEM—*contd.*

Mirpur Khas-Jhudo railway (3′ 3⅜″ gauge)—*concld.*

Main provisions of agreement and contracts—*concld.*

(7) *Rates and fares.*—

(vi) *Special obligations as to the conveyance of.*—
(*a*) Mails, troops, police, high Government officials and Government stores.
(*b*) Government bullion and coin, and the persons in charge thereof.

} As noted under Jodhpur Hyderabad railway (British section) (3′ 3⅜″ gauge).

(vii) *Power of the Government to determine contract.*—Government may determine the contract by "Notice of purchase" either on the 31st December 1928, or on the 31st December in the last year in any subsequent period of ten years, on giving twelve months' notice.

On the termination of the contract Government takes possession of the railway and all its appurtenances on the payment to the Company of a sum equal to 25 times the amount of the average net earnings of the railway during the three years immediately preceding the date of that event provided that such sum shall not exceed by more than 20 per cent, nor be less than, the total capital expenditure.

(viii) *Power of the Company to surrender contract*—Nil.

(ix) *Term of contract.*—Until determined under (vii).

Statistics of working—

Year.	Mileage open at end of each year.	Total capital outlay, including suspense, to end of each year, *i.e.*, outlay on (i) lines open and (ii) lines partly or wholly under construction.	Gross earnings.	Net earnings.	Percentage of net earnings on total capital outlay given in column (3).	Earnings per mile per week.	Proportion of expenses to earnings.
1	2	3	4	5	6	7	8
	Miles.	Rs.	Rs.	Rs.		Rs.	
1909 . . .	50·43	7,37,261	43,535	26,121	3·54	25	40·00
1910 . . .	50·43	7,20,900	98,463	59,078	8·20	38	40·00
1911 . . .	50·43	7,20,329	96,228	57,737	8·02	37	40·00
1912 . . .	50·43	7,22,627	1,16,670	70,002	9·69	44	40·00
1st qr. of 1913 .	50·43	7,22,771	48,383	29,030	4·02	74	40·00
1913-14 . . .	50·43	7,24,396	1,46,184	84,110	11·61	53	40·60
1914-15 . . .	50·43	7,24,396	1,34,013	80,408	11·10	51	40·00
1915-16 . . .	50·43	7,24,396	1,26,507	75,904	10·48	48	40·00
1916-17 . . .	50·43	7,31,806	1,36,695	82,017	11·21	52	40·00
1917-18 . . .	50·43	7,31,806	1,74,208	1,04,525	14·28	66	40·00

Mirpur Khas-Khadro railway (3′ 3⅜″ gauge)—

Progress in opening—

Section of railway.	Date of opening.	Miles.	Total.
1	2	3	4
Mirpur Khas to Khadro	1-1-12	49·50	49·50

Details of construction—

Permanent-way.—The line is laid with 60-lb. iron rails for 9 miles and 36-lb. flat-footed steel rails for 40½ miles. The sleepers used are deodar throughout.

Ballast.—The line is not ballasted.

Fencing.—The line is unfenced.

Curves.—The sharpest curve is of 995 feet radius.

Gradients.—The ruling gradient is 1 in 200.

Contracts—

Dated the 9th June 1913, *between the Secretary of State and the Sind Light Railways, Limited*, as to the construction of the Mirpur Khas-Khadro railway and its maintenance, management and working as a part of the Mirpur Khas-Jhudo railway.

Dated the 5th December 1913, *between the Secretary of State and Their Highnesses the Maharajas of Jodhpur and Bikaner*, as to the maintenance, management and working, by the agency of the Jodhpur-Bikaner Railway Administration, of the Mirpur Khas-Khadro railway as an integral part of the Mirpur Khas-Jhudo railway.

Main provisions of contracts—

The same as noted under Mirpur Khas-Jhudo railway (3′ 3⅜″ gauge) except as follows:—

Power of the Government to determine contract.—Government may determine the contract by 'Notice of purchase' either on the 31st December in the twenty-first year after the opening of the line for traffic, or on the 31st December in the last year of any subsequent period of 10 years, paying

JODHPUR-BIKANER RAILWAY SYSTEM—*concld.*

Mirpur Khas-Khadro railway (8′ 3⅜″)—*concld.*

Main provisions of contracts—*concld.*

to the Company 25 times the amount of the average yearly net earnings of the railway during the 3 years immediately preceding the purchase, provided that such sum shall not exceed by more than 20 per cent, nor be less than, the total capital expenditure.

Government may also determine the contract and purchase the railway in the following events :—

(*a*) If it is considered desirable that the gauge of the railway should be altered ;

(*b*) If it is considered desirable to convert the railway into a line of through communication ; and

(*c*) If it is considered desirable to extend the line (without altering the gauge or making the railway part of a through route) and the Company is unable or unwilling to supply the necessary capital for the purpose ;

on payment to the company 25 times the average net earnings during the 3 years preceding the purchase or 115 per cent of the capital expenditure whichever shall be the greater, but if the purchase occurs within less than 3 years from the opening of the line the price shall be 115 per cent of the capital expenditure.

Statistics of working—

Year.	Mileage open at end of each year.	Total capital outlay, including suspense, to end of each year, *i.e.*, outlay on (i) lines open and (ii) lines partly or wholly under construction.	Gross earnings.	Net earnings.	Percentage of net earnings on total capital outlay given in column (3).	Earnings per mile per week.	Proportion of expenses to earnings.
1	2	3	4	5	6	7	8
	Miles.	Rs.	Rs.	Rs.		Rs.	
1912 . . .	49·50	8,24,749	60,432	36,259	4·40	23	40·00
1st qr. of 1913 .	49·50	8,22,116	26,941	16,165	1·97	42	40·00
1913-14 . . .	49·50	8,22,222	83,334	50,000	6·08	32	40·00
1914-15 . . .	49·50	8,22,603	69,806	41,884	5·09	27	40·00
1915-16 . . .	49·50	8,23,096	70,237	42,142	5 12	27	40·00
1916-17 . . .	49·50	8,23,096	85,302	51,182	6 22	33	40·00
1917-18 . .	49 50	8,23,096	94,547	56,728	6·89	37	40·00

Pipar-Bilara Light railway (2′ 0″ gauge)—

The line was constructed originally as a steam tramway, to which the provisions of the Indian Railways Act were applied on the 6th July 1912.

Progress in opening—

Sections of railway.	Date of opening.	Miles.	Total.
1	2	3	4
Pipar Road to Bhavi	25-11-10	19·00	
Bhavi to Bilara	1-3-12	6·25	
TOTAL . .	...	...	25·25

Details of construction—

Permanent-way.—The permanent-way consists of 24-lb. steel rails on deodar sleepers.

Ballast.—The line is ballasted with earth.

Fencing.—The line is not fenced.

Curves.—The radius of the sharpest curve is 478 feet.

Gradients.—The ruling gradient is 1 in 600— except in the sections from mile 6·38 to mile 6·76 and from mile 7 to mile 7·53, where the gradient is 1 in 100 in cuttings.

Agreement—

Nil.—The line was constructed and is owned by the Jodhpur Durbar by whom it was worked up to the 3rd February 1913. From the 4th February 1913, the working was taken over by the Jodhpur-Bikaner Railway Administration.

Statistics of working—

Year.	Mileage open at end of each year.	Total capital outlay, including suspense, to end of each year, *i.e.*, outlay on (i) lines open and (ii) lines partly or wholly under construction.	Gross earnings.	Net earnings.	Percentage of net earnings on total capital outlay given in column (3).	Earnings per mile per week.	Proportion of expenses to earnings.
1	2	3	4	5	6	7	8
	Miles.	Rs.	Rs.	Rs.		Rs.	
1910 . .	19·00	1,95,767	1,732	632	0·32	17	63·51
1911 . .	19·00	2,51,555	15,996	5,246	2·08	16	67·20
1912 . .	25·00	2,74,857	22,986	5,509	2·00	18	76·03
1st qr. of 1913	25·00	2,74,936	5,862	2,159	0·79	18	63·18
1913-14 . .	25·25	2,76,987	26,156	1,323	0·48	20	94·94
1914-15 . .	25·25	2,79,837	25,187	9,402	3·36	19	62·67
1915-16 . .	25·25	2,90,205	33,679	12,472	4·30	26	62·96
1916-17 . .	25·25	2,90,147	25,536	4,832	1·67	19	81·08
1917-18 . .	25·25	2,90,147	20,087	4,216	1·45	15	79·01

JUNAGAD STATE RAILWAY (3′ 3⅜″ gauge).

This line was constructed by Government agency for the Native State of Junagad (after which it is named). It was, up to the 31st March 1911, worked by an Administrative Coalition of the States of Bhavnagar, Gondal, Junagad and Porbandar, which was formed for the purpose of working, as one undertaking, the railways which, prior to that date, were comprised in the Bhavnagar-Gondal-Junagad-Porbandar railway. The Coalition ceased to exist on the 1st April 1911, on and from which date the line is being worked independently as a separate and distinct railway.

Progress in opening—

Sections of railway.	Date of opening.	Miles.	Total.	Grand total.
1	2	3	4	5
Main line—				
Jetalsar to Junagad	1-9-88	16·00		
Junagad to Veraval Docks	1-2-89	51·30	67·30	
Branches—				
Saradiya branch—				
Shapur to Manavadar	15-2-10	15·86		
Manavadar to Bantva	25-12-10	3·45		
Bantva to Saradiya	15-5-15	7·00	26·31	
Visavadar branch—				
Junagad to Bilkha	20-5-12	13·64		
Bilkha to Visavadar.	15-2-13	12·92	26·56	
Dungarpur quarry line	10-12-12	0·73	0·73	
TOTAL OPEN MILEAGE	...	...	...	120·90
UNDER CONSTRUCTION OR SANCTIONED FOR CONSTRUCTION—				
Veraval to Una (sanctioned on 16th June 1915)	...	56·91	56·91	56·91
GRAND TOTAL	...	...	...	177·81

Details of construction—

Permanent-way.—The permanent-way consists of 41¼-lb. flat-footed steel rails on creosoted pine, deodar and jodka teak sleepers. A length of 29¾ miles, Jetalsar to Lushala, of the main line, except in station yards, has been relaid with 50 lb. rails.

Ballast.—The main line, Jetalsar to Veraval, is ballasted with stone. The Junagad-Visavadar and Shapur-Saradiya branches are ballasted with moorum on banks and stone in cuttings.

Fencing.—The line is practically unfenced.

Curves.—The sharpest curve is of 1,200 feet radius.

Gradients.—The ruling gradient is 1 in 100 which occurs on the approaches to the Oojat River on the main line, and also on the approach to Sorath Vanthali station on the Saradiya branch.

Agreement—

Nil.—The line is owned and worked by the State of Junagad.

Statistics of working—

Year.	Mileage open at end of each year.	Total capital outlay, including suspense, to end of each year, i.e., outlay on (i) lines open and (ii) lines partly or wholly under construction.	Gross earnings.	Net earnings.	Percentage of net earnings on total capital outlay given in column (3).	Earnings per mile per week.	Proportion of expenses to earnings.
1	2	3	4	5	6	7	8
	Miles.	Rs.	Rs.	Rs.		Rs.	
1911	88·96	48,05,266	4,45,926	2,06,461	4·30	96	53·70
1912	100·50	55,92,589	5,33,085	2,65,510	4·75	102	50·19
1st qr. of 1913.	113·42	57,12,741	1,62,434	84,436	1·48	110	48·02
1913-14	113·42	60,44,323	6,18,701	2,97,380	4·92	105	51·93
1914-15	113·90	62,46,354	6,21,293	2,92,418	4·68	105	52·93
1915-16	120·90	64,08,751	6,96,353	3,40,103	5·33	111	51·16
1916-17	120·90	66,60,644	7,49,201	3,68,837	5·54	119	50·77
1917-18	120·90	73,58,883	8,14,345	1,74,236	2·37	129	78·60

MORVI RAILWAY (3′ 3⅜″ and 2′ 6″ gauges).

The whole line was originally on the 2′ 6″ gauge. In 1905 the length between Wadhwan and Rajkot was converted to the 3′ 3⅜″ gauge—from Wadhwan to Than Road, 31·34 miles, on a new alignment and onwards to Rajkot, 42·60 miles, on the original alignment with a few unimportant diversions. The line between Vankaner and Morvi was retained on the 2′ 6″ gauge.

Progress in opening—

Sections of railway.	Date of opening.	Miles.	Total.	Grand total.
1	2	3	4	5
3′ 3⅜″ gauge—				
Wadhwan to Rajkot Junction	4-3-05	73·94	73·94	
2′ 6″ gauge—				
Vankaner to Morvi	24-3-87	15·70		
Quarry branch	23-12-05	3·19	18·89	
Total .	...	...	...	92·83

Details of construction—

Permanent-way.—The permanent-way on the 3′ 3⅜″ gauge section consists of 41¼-lb. flat-footed steel rails on half-round teak sleepers; and that on the 2′ 6″ gauge section of 29-lb. flat-footed steel rails on steel trough and creosoted pine sleepers.

Ballast.—The line is ballasted with moorum (disintegrated trap).

Fencing.—The line is unfenced.

Curves.—The sharpest curve on the 3′ 3⅜″ gauge is of 950 feet radius; and that on the 2′ 6″ gauge is of 500 feet radius.

Gradients.—The ruling gradient of the greater part of the railway is about 1 in 200 with a 1 in 150 banking section.

Contract—

Nil.—The line was constructed by His Highness the Thakore Sahib of Morvi, at his own expense, and is maintained and worked by him.

Statistics of working (Those for the periods prior to 1908 will be found in Appendix 38 to the Railway Administration Report for 1907).—

Year.	Mileage open at end of each year.	Total capital outlay, including suspense, to end of each year, *i.e.*, outlay on (i) lines open, and (ii) lines partly or wholly under construction.	Gross earnings.	Net earnings.	Percentage of net earnings on total capital outlay given in column (3).	Earnings per mile per week.	Proportion of expenses to earnings.
1	2	3	4	5	6	7	8
	Miles.	Rs.	Rs.	Rs.		Rs.	
1908 . . .	92·83	46,42,725	5,08,262	2,82,464	6·08	105	45·42
1909 . . .	92·83	47,95,497	4,71,830	2,12,900	4·44	98	54·88
1910 . . .	92·83	49,91,020	5,29,105	2,96,286	5·94	109	44·00
1911 . . .	92·83	49,91,298	6,86,082	4,22,520	8·47	132	33·57
1912 . . .	92·83	51,21,785	7,24,917	4,54,377	8·87	150	37·32
1st qr. of 1913	92·83	51,14,001	1,90,849	1,40,141	2·74	158	26·57
1913-14 . .	92·83	52,11,157	7,76,902	5,03,049	9·65	161	35·25
1914-15 . .	92·83	52,83,719	7,66,981	4,86,346	9·24	159	36·58
1915-16 . .	92·83	53,80,469	7,73,044	4,92,318	9·15	160	36·31
1916-17 . .	92·83	53,60,305	8,68,311	6,23,172	11·63	180	28·26
1917-18 . .	92·83	53,76,628	9,76,455	7,14,137	13·28	202	26·86

MYSORE-ARSIKERE RAILWAY (3′ 3⅜″ gauge).

The construction of this line by the Mysore Durbar was sanctioned by the Government of India in the Foreign Department, in their letter No. 3474-I.B., dated the 29th October 1913.

Progress in opening—

Section of railway.	Date of opening.	Miles.	Total.
1	2	3	4
Mysore to Arsikere	3-1-18	102·95	102·95

Details of construction—

Permanent-way.—The permanent-way consists of 50-lb., with a small percentage of 33 and 30-lb., flat footed steel rails, B. S. section, laid mostly on Mysore teak sleepers.

Ballast.—The ballast consists of either stone, gravel or sand. Approaches to bridges and most of the cuttings are ballasted with stone and the banks with good gravel or moorum.

Fencing.—The line is unfenced except at important stations and level crossings.

Curves.—The sharpest curve is of 573 feet radius.

Gradients.—1 in 95 compensated.

Agreement—

Nil.—The line is owned and worked by the Mysore Government.

Statistics of working—

Year.	Mileage open at end of the year.	Total capital outlay, including suspense to end of the year, *i.e.*, outlay on (i) lines open, and (ii) lines partly or wholly under construction.	Gross earnings.	Net earnings.	Percentage of net earnings on total capital outlay given in column (3).	Earnings per mile per week.	Proportion of expenses to earnings.
1	2	3	4	5	6	7	8
	Miles.	Rs.	Rs.	Rs.		Rs.	
1917-18 ...	102·95	81,11,605	65,817	6,582	0·08	52	90·00

OKHAMANDAL RAILWAY (3′ 3⅜″ gauge).

Sanction to the construction of this line by the Baroda Durbar was conveyed in Railway Board's Notification No. 156, dated the 5th June 1913. Work has been stopped on this line for the present pending certain further orders of the Government of India.

Progress in opening—

Section of railway.	Date of opening.	Miles.	Total.
1	2	3	4
Kuranga to Arthara (sanctioned on 5th June 1913)	...	37·02	37·02

ROHILKUND AND KUMAON RAILWAY SYSTEM.

Chairman.——Alexander Izat, Esq., C.I.E.

Secretary.—E. A. Neville, Esq.

Office.—237, Gresham House, Old Broad Street, London, E.C.

Date of registration of the Company.—6th October 1882.

Lines comprised in the system.—The Rohilkund and Kumaon railway system is made up of—

	Miles.
(*a*) Rohilkund and Kumaon railway (3′ 3⅜″ gauge)	258·72
(*b*) Lucknow-Bareilly railway (3′ 3⅜″ gauge)	312·43
(*c*) Powayan Light railway (2′ 6″ gauge)	38·86
Total	610·01

Running powers—

Home line over foreign line:—

Over Ramganga bridge, between Bareilly and Basharatganj, Oudh and Rohilkhand railway.	for passenger and goods trains.	0·52
Over Ramganga bridge, between Dalpatpur and Moradabad, Oudh and Rohilkhand railway.		0·40
		0·92

Foreign line over home line:—

Bengal and North-Western railway, Daliganj to Aishbagh, for passenger and goods trains	3·40

Rohilkund and Kumaon railway (3′ 3⅜″ gauge)—

Progress in opening—

Sections of railway.	Date of opening.	Miles.	Total.	Grand total.
1	2	3	4	5
Main line—				
Bhojeepura to Kathgodam	12-10-84	53·92		
			53·92	
Extensions—				
Kasganj extension—				
Bareilly to Soron	29-1-06	54·95		
Soron to Kasganj	4-1-85	9·00		
			63·95	
Ramnagar extension—				
Moradabad to Got	10-5-08	4·19		
Got to Kashipur	11-1-08	26·86		
Kashipur to Ramnagar	1-4-07	17·14		
			48·19	
Kashipur extension—				
Lalkua to Kashipur	15-12-07	36·00		
			36·00	
Shahjahanpur extension—				
Pilibhit to Bisalpur	24-2-11	23·14		
Bisalpur to Carewganj	13-1-12	31·12		
Shahbaznagar to Shahjahanpur	18-3-16	2·40		
			56·66	
GRAND TOTAL	...	...	...	258·72

Details of construction—

Permanent-way.—The permanent-way consists of 41¼ and 50-lb. steel rails on sâl, Australian and deodar sleepers. The lines from Lalkua to Ramnagar, Moradabad to Kashipur and Pilibhit to Carewganj are laid with 41¼-lb. steel rails on sâl and deodar sleepers.

Ballast.—The ballast consists of broken brick and shingle.

Fencing.—The line is partially fenced.

Curves.—There are no curves with a radius of less than 716 feet.

Gradients.—The ruling gradient between Bhojeepura and Kathgodam is 1 in 280, except near the hill where it is 1 in 70; between Bareilly and Kasganj, 1 in 400; between Moradabad and Ramnagar, 1 in 400, except near the hills where it is 1 in 125; between Lalkua and Kashipur, 1 in 200, except for a short distance near Lalkua where it is 1 in 100; and between Pilibhit and Carewganj, 1 in 400.

Contracts—

Dated the 12th October 1882 (called the original contract), *between the Secretary of State and the Rohilkund and Kumaon Railway Company*, as to the construction, maintenance, management and working of the railway from Bhojeepura to Kathgodam.

ROHILKUND AND KUMAON RAILWAY SYSTEM—*contd.*

Rohilkund and Kumaon railway (3′ $3\frac{3}{8}$″ gauge)—*contd.*

Contracts—*concld.*

Dated the 8th September 1890 (called the principal contract), *between the Secretary of State and the Rohilkund and Kumaon Railway Company*, as to the working of the Company's line and the construction, maintenance, management and working of certain State lines.

Dated the 31st December 1892 (supplemental to the contract of 1890 and called the capital advance contract), *between the Secretary of State and the Rohilkund and Kumaon Railway Company*, for the advance of capital for the State line and as to debentures.

Dated the 5th February 1901 (supplemental to the contracts of 1882, 1890 and 1892), *between the Secretary of State and the Rohilkund and Kumaon Railway Company*, prolonging and continuing the contract of 1890, subject to certain modifications thereof and of the contracts of 1882 and 1892.

Dated the 24th April 1903 (supplemental to the contracts of 1882 and 1890), *between the Secretary of State and the Rohilkund and Kumaon Railway Company*, as to the adoption of 1*s*. 4*d*. per rupee as the "prescribed" rate of exchange.

Dated the 15th July 1904 (supplemental to the contracts of 1882, 1890, 1901 and 1903), *between the Secretary of State and the Rohilkund and Kumaon Railway Company*, as to the construction, maintenance, management and working of certain Branch railways and the purchase of existing Branch lines.

Dated the 13th July 1906, *between the Secretary of State and the Rohilkund and Kumaon Railway Company*, as to the provision of moneys for capital expenditure on the Powayan Steam Tramway, and the acquisition by the Company of interests in that Tramway, and other matters.

Dated the 24th March 1909 (supplemental to, and in modification of, the contracts of 1882, 1890, 1892, 1901, 1903, 1904 and 1906), *between the Secretary of State and the Rohilkund and Kumaon Railway Company*, as to the raising of capital for the purposes both of the Company's lines and of the Lucknow-Bareilly railway, and for the construction, maintenance, management and working of the Pilibhit-Barnadeo railway, extensions of the Dudhwa branch with a permanent bridge over the Sarda river, and the Pilibhit-Shahjahanpur railway.

Dated the 3rd July 1914 (supplemental to the contracts of 1882, 1890, 1892, 1901, 1903, 1904, 1906 and 1909), *between the Secretary of State and the Rohilkund and Kumaon Railway Company*, as to the adoption of the Government financial year for the preparation of the accounts.

Main provisions of contracts—

(i) *Land.*—Land for the Company's railway constructed in pursuance of the original contract was provided by the Government free of cost to the Company, subject to the condition that the Company pays, on demand, to Government the cost price of land purchased by Government for the purposes of the Company's railway. Land for the railway from Gola Gokaran Nath to Pilibhit, and for all the other State lines provided by the Government after the 1st January 1891 is charged to capital subsequent to the date of the principal contract. Land for Branch railways and Branch line works is provided free, except and excluding land required for quarrying ballast, brickfields or kindred purposes.

(ii) *Government aid.*—Government guaranteed interest at 4 per cent per annum in sterling on the capital up to £200,000 expended on the *Company's* original railway until its opening throughout for public traffic but for no longer than and including 1st January 1885; thereafter a subsidy of Rs. 20,000 half-yearly for ten years from the date of opening, which ceased on the 31st December 1891.

In the case of the *Lucknow-Bareilly* railway the Government guarantee the principal and interest in respect of debentures for the nominal amount of £147,000 issued by the Company in order to raise the sum of £160,000 (the sum actually realised being £160,837).

[NOTE.—Of these, debentures for £40,000 and £32,000 were paid off from advances by the Secretary of State in England on 1st July 1911 and 1st July 1915, respectively].

The Company reimburses the Government any amount by which the interest payable under the guarantee may exceed Rs. 96,000 in any one year.

All sums advanced by the Government after the 31st December 1900 bear interest at the rate of $3\frac{1}{2}$ per cent per annum.

(iii) *Terms of working.*—The Lucknow-Bareilly railway is worked in conjunction with the Company's own line, a joint account of working expenses being kept. Joint working expenses account includes—

(1) any item of capital expenditure not exceeding Rs. 1,000 classed as "minor work" subject to a maximum charge on such account of Rs. 15 per mile of railway open per half-year, and

(2) a payment to Government of Rs. 20 per mile of railway open to traffic per half-year for audit and supervision.

The joint working expenses of the open system are divided between—

(*a*) the Company's original line and "the Additional Main Line Works,"

(*b*) the Lucknow-Bareilly railway and "the State Line Works," and

(*c*) "the Branch Railways" and "the Branch Line Works,"

ROHILKUND AND KUMAON RAILWAY SYSTEM—*contd.*

Rohilkund and Kumaon railway (3′ 3⅜″ gauge)—*contd.*

Main provisions of contracts—*contd.*

in proportion to the respective gross earnings of those three classes.

(iv) *Distribution of profits.*—The earnings of the Company's original line and "the Additional Main Line Works," after payment of all working expenses, are applied in the following order :—

(*a*) in payment of contribution to Provident Fund contingent on net earnings,

(*b*) in payment of interest on the Company's Main Line Stock (being part of the Joint Debenture Stock),

(*c*) in payment of interest on borrowed capital, and

(*d*) in payment of interest at 6 per cent per annum on the *bond fide* paid-up share capital of the Company.

The surplus is divided equally between the Government and the Company.

The net earnings of "the Branch Railways" and of "the Branch Line Works" belong absolutely to the Company, without any right of the Secretary of State to participate therein, subject only to the payment thereout of contribution to Provident Fund contingent on net earnings and interest on the Company's Branch Line Stock (being part of the Joint Debenture Stock).

The net earnings of the Lucknow-Bareilly railway and "the State Works", *i.e.*, of the undertaking, are applied in the following order :—

(*a*) in payment of contribution to Provident Fund contingent on net earnings,

(*b*) in payment of the interest at 4 per cent per annum on the State Stock (being part of the Joint Debenture Stock), except interest on such portion of the State Stock as may for the time being be appropriated for lines under construction, which latter is charged to capital till the close of the half-year next after the opening of lines to traffic,

(*c*) in payment of the interest on the debentures of £147,000 issued by the Company in 1890 and of interest at 4 per cent per annum on any further capital supplied by the Company or advanced by the Government for the purposes of the undertaking (3½ per cent per annum on Government advances subsequent to the 31st December 1900),

(*d*) in payment to the Government of interest at 4 per cent per annum on the value at cost price of the railways, rolling-stock, plant, machinery and land handed over to or retained by the Company on the 1st January 1891 (standing to debit of Part I of the Capital Account), and

(*e*) the residue is divided between the Government and the Company in the ratio of their respective shares of capital in the undertaking.

[*Note 1.*—The State Stock (part of Joint Debenture Stock), excluding and except so much of it as is appropriated for the construction of the Pilibhit-Barmdeo railway, does not participate in profits either as Government capital or as Company's capital.]

[*Note 2.*—The amount advanced by the Secretary of State to pay off debentures for £72,000 (part of £147,000 *vide* (ii) above and note in connection therewith) does not affect the capital of either the Secretary of State or the Company for the purposes of division of surplus profits of the Lucknow-Bareilly railway.]

(v) *Rates and fares.*—

Maxima :— Company's lines :—

Passengers :—

1st class, 3 annas per mile.
Lower class, 4½ pies per mile.

Luggage, 2 pies per maund per mile.

Goods :—

Edible grains, ⅓rd pie per maund per mile.
Other goods, 2 pies per maund per mile.

Parcels and live-stock at rates not exceeding 50 per cent over rates on the East Indian railway.

On the Branch railways food grains and salt are to be carried at rates, not less than the minimum for goods, as the Government may fix; and fuel for distances exceeding 100 miles on the Branch railways, or on any part thereof together with any part of the other railways belonging to or worked by the Company at a rate not exceeding ⅛th pie per maund per mile.

Lucknow-Bareilly railway and branches :—

The Government to authorise, from time to time, maximum and minimum rates, and to prescribe the classification of passengers and goods, as well as the extent to which, within the maxima and minima, the Company may vary such rates.

For traffic between the joint line (Bareilly-Bhojeepura) and the Company's own line, the rates in force on the latter may be levied, except in the case of food grains and salt, and of fuel carried

ROHILKUND AND KUMAON RAILWAY SYSTEM—*contd.*

Rohilkund and Kumaon railway (3′ 3⅜″ gauge)—*contd.*

Main provisions of contracts—*contd.*

for distances exceeding 100 miles ; for the former the rates will not be less than the minimum for goods fixed by Government, and for the latter the rates will not exceed ⅛th pie per maund per mile.

(vi) *Special obligations as to the conveyance of.*—

(*a*) Mails.—On the Company's original line, to be conveyed on payment of Rs. 5,000 half-yearly. On the extensions of the Company's original line (Additional Main Line Works), the Company is to receive a reasonable remuneration in lieu of the sum of Rs. 5,000 above noted.

On the Lucknow-Bareilly railway and branches, on the same general conditions as are for the time being in force on other 3′ 3⅜″ gauge State railways, and at rates to be approved by the Government.

(*b*) Troops, police, high Government officials and Government stores.—

On the Company's lines, at the ordinary tariff rates charged to the public.

On the Lucknow-Bareilly railway and branches, on the same general conditions as are for the time being in force on other 3′ 3⅜″ gauge State railways, and at rates to be approved by the Government.

(*c*) Government bullion and coin, and the persons in charge thereof.—

On the Company's lines at special rates to be from time to time agreed upon between the Government and the Company.

On the Lucknow-Bareilly railway and branches, at special rates to be approved by the Government.

(vii) *Power of the Government to determine contract.*—

Contract of 1882 : The Government may terminate the contract at the end of the 50th year, *i.e.*, on the 31st December 1932, by giving 12 months' notice. If the contract terminate by such notice, or by the efflux of time, the Government are to pay to the Company 25 times the average net earnings, less the Government share of surplus profits, during the 5 years immediately preceding either the date of the termination or (at the option of the Government) the 31st December 1912.

[*Note.*—The cost of making good any shortcomings which render the value of the line not commensurate with the capital expended may be deducted from the purchase price payable.]

The Government may also determine the contract at any time on 6 months' notice (called the "Notice of Determination") if the Company fail to observe its obligations, on payment of the value of the permanent-way, stock and plant, or may call upon the Company to accept the same in lieu of payment, in which latter case the Company must remove its property within 9 months from the termination of the contract, otherwise it becomes the property of the Government.

Contract of 1890 : If the original contract with the Company, dated the 12th October 1882, terminate for any reason, then the contract for the working of the Lucknow-Bareilly railway *ipso facto* terminates at the same time. The Government may terminate the contract on the 31st December 1932, or on the 31st December in any subsequent year, by giving 12 months' notice. The Government may also determine the contract on 6 months' notice (called the "Notice of Determination") if the Company fail to observe its obligations.

On the determination of the contract the Government will resume possession of the State railway, and at their option will either repay the capital that has been received from the Company for the purposes of the undertaking, or will take over the liability of the Company in respect of such capital. If the capital is repaid, the payment may, at the option of the Government, be made either in England or in India.

Contract of 1904 : If the original contract with the Company, dated the 12th October 1882, terminate either by "Notice of Purchase" or by the efflux of time, then the contract of 1904 terminates at the same time, in which case the Government are to pay to the Company 25 times the average net earnings of the Lalkua-Kashipur-Moradabad-Ramnagar branches during the 5 years immediately preceding the termination, provided such sum does not exceed by more than 20 per cent, nor be less than, the capital expenditure on those railways.

[*Note.*—The cost of making good any shortcomings which render the value of the line not commensurate with the capital expended may be deducted from the purchase price payable.]

The Government may also determine the contract at any time on 6 months' notice (called the "Notice of Determination") if the Company fail to observe its obligations, on payment of the value of the permanent-way, stock and plant, or may call upon the Company to accept the same in lieu of payment, in which latter case the Company must remove its property within 9 months from the termination of the contract, otherwise it becomes the property of the Government.

Contract of 1909 : By clause 18 of the contract of the 24th March 1909, if either the contract of 1890 be determined from any cause or that of 1909 be determined by "Notice of Purchase" as far as each relates to "the State lines", but not further or otherwise, then the other of the two contracts *ipso facto* terminates at the same time.

ROHILKUND AND KUMAON RAILWAY SYSTEM—*contd.*

Rohilkund and Kumaon railway (3′ 3⅜″ gauge)—*concld.*

Main provisions of contracts—*concld.*

By clause 19 of the contract of the 24th March 1909, that contract so far as it relates to "the Scheduled Company's Works" (the Pilibhit-Shahjahanpur line), in common with the contract of 1904 terminates *ipso facto* with the determination by "Notice of Purchase" of the Company's original contract of the 12th October 1882, the Government, however, only having the power to purchase "the Company's original line", "the Branch railways" and "the Scheduled Company's Works" collectively, not any of them separately from the other or others of them.

By clause 20 of the contract of the 24th March 1909—

(*a*) the contract of 1909 so far as it relates to "the Additional Main Line Works" terminates *ipso facto* with the determination by "Notice of Determination" of the Company's original contract of the 12th October 1882,

(*b*) the contract of 1909 so far as it relates to "the Branch Line Works" terminates *ipso facto* with the determination by "Notice of Determination" of the contract of 1904, except as noted above against clauses 18 and 20 of the contract of 1909 and also except as provided for in clause 77 of the contract of 1890, the several powers of the Government to determine by "Notice of Determination" the contracts respectively of 1882, 1890 and 1904, and also that of 1909 so far as they relate to "the State Line Works" to "the Additional Main Line Works" and to "the Branch Line Works", remain separate and unaffected, and are exercisable as to any one or parts thereof independently and without prejudice as to the continuance of the others or parts thereof, in the event of the Company failing to observe its obligations contained in the contract or part of the contract which it is sought to determine: provided that the powers of the Government to determine, by "Notice of Determination", the contract of 1909 so far as it relates to "the Additional Main Line Works" and to "the Branch Line Works" are exercisable separately in respect of any line or branch forming an independent part of such works, if the Company fail to observe its obligations in regard thereto.

(viii) *Power of the Company to surrender contract.*—Nil.

(ix) *Term of contract.*—Those of 1882, 1904 and 1909, up to the 31st December 1981; that of 1890, up to the 31st December 1932.

Statistics of working—

Year.	Mileage open at end of each year.	Total capital outlay, including suspense, to end of each year, i.e., outlay on (i) lines open, and (ii) lines partly or wholly under construction.	Gross earnings.	Net earnings.	Percentage of net earnings on total capital outlay given in column (3).	Earnings per mile per week.	Proportion of expenses to earnings.	Remarks.
1	2	3	4	5	6	7	8	9
	Miles.	Rs.	Rs.	Rs.		Rs.		
1884	55·00	19,40,266	36,543	1,733	0·09	51	95·26	Net earnings from 1885 to 1894 include an annual subsidy of Rs. 40,000.
1885	55·00	21,71,124	2,38,572	80,153	3·69	68	66·40	
1886	55·00	22,52,962	3,00,191	1,23,832	5·50	86	58·75	
1887	55·00	22,91,619	3,19,274	1,16,800	5·10	92	63·42	
1888	55·00	23,40,100	3,31,092	1,42,120	6·07	96	57·46	
1889	55·00	23,96,624	3,72,270	1,60,135	6·68	107	56·98	
1890	55·00	24,17,052	3,14,834	1,51,003	6·25	90	52·04	
1891	53·92	20,49,158	3,85,084	1,60,081	7·81	112	58·43	
1892	53·92	20,58,575	4,33,648	1,97,780	9·61	127	54·39	
1893	53·92	20,82,280	4,25,909	1,83,180	8·80	124	56·99	
1894	53·92	20,80,440	4,59,313	2,15,191	10·34	134	53·15	
1895	53·92	20,78,251	4,04,504	1,52,209	7·32	118	62·37	
1896	53·92	20,79,863	4,26,905	1,53,821	7·40	125	63·96	
1897	53·92	21,20,428	4,23,720	1,72,319	8·13	124	59·83	
1898	53·92	21,42,552	4,62,308	2,20,785	10·30	135	52·24	
1899	53·92	21,18,313	4,65,623	2,34,020	10·89	136	49·74	
1900	53·92	21,53,125	4,37,572	2,28,048	10·59	128	47·88	
1901	53·92	22,09,423	3,84,314	2,09,896	9·50	112	45·38	
1902	53·92	23,36,911	4,10,626	2,18,317	9·34	120	46·83	
1903	53·92	25,89,790	4,13,147	2,20,405	8·51	121	46·65	
1904	53·92	43,55,575	4,18,787	2,24,403	5·15	122	46·41	
1905	53·92	93,34,559	4,40,664	1,54,126	1·65	129	65·02	The decrease in net earnings in 1905 is due to the heavy outlay on relaying the main line.
1906	117·87	1,16,53,319	8,03,607	3,65,161	3·13	124	54·56	
1907	117·87	1,28,55,065	10,67,928	5,69,506	4·43	158	46·67	
1908	203·35	1,35,79,271	11,44,078	5,50,193	4·05	102	51·91	
1909	202·06	1,36,93,877	12,70,929	6,26,791	4·57	121	50·71	
1910	202·06	1,52,28,920	13,46,150	7,62,425	5·00	128	43·36	
1911	225·20	1,59,24,548	14,73,586	7,99,809	5·02	128	45·72	
1912	256·32	1,62,89,858	18,99,670	11,51,734	7·07	144	39·37	
1st qr of 1913	256·32	1,63,05,789	4,88,833	2,99,341	1·84	37	38·76	
1913-14	256·32	1,67,73,664	18,84,583	10,57,658	6·30	141	43·88	
1914-15	256·32	1,69,38,847	15,58,479	7,39,623	4·37	117	52·54	
1915-16	258·84	1,69,99,623	17,25,863	9,13,086	5·37	128	47·09	
1916-17	258·72	1,69,41,247	18,90,718	11,11,676	6·56	141	41·20	
1917-18	258·72	1,68,16,023	21,68,562	12,19,547	7·25	161	43·76	

ROHILKUND AND KUMAON RAILWAY SYSTEM—*contd.*

Lucknow-Bareilly railway (3' 3¾" gauge).

Progress in opening—

Sections of railway.	Date of opening.	Miles.	Total.	Grand total.
1	2	3	4	5
Main line—				
Lucknow to Sitapur	15-11-86	55·00		
Sitapur to Lakhimpur	15-4-87	28·50		
Lakhimpur to Gola Gokaran Nath	15-12-87	21·50		
Gola Gokaran Nath to Pilibhit	1-4-91	57·55		
Pilibhit to Bhojeepura	15-11-84	24·00		
Bhojeepura to Bareilly	12-10-84	12·00		
Branches and extensions—			198·55	
Bareilly grain siding	1-4-94	1·75		
			1·75	
Kauriálaghat extension—				
Mailani to Sarda	1-1-93			
Sarda to Sohela	10-3-93	30·78		
Sohela to Sonaripur	18-3-94			
Sonaripur to Kauriálaghat	2-1-11	20·54		
			51·32	
Chandan Choki extension—				
Dudhwa to Chandan Choki	1-4-03	7·57		
			7·57	
Gauri Phanta extension—				
Dudhwa to Gauri Phanta	15-4-14	14·49		
			14·49	
Barmdeo extension—				
Pilibhit to Barmdeo	15-5-12	38·75		
			38·75	
GRAND TOTAL	...	...	...	312·43

Details of construction—

Permanent-way.—The permanent-way consists of 41¼-lb. and 50-lb. steel rails on sâl sleepers.

Ballast.—The ballast consists of broken brick, kunkur and shingle.

Fencing.—The line is partially fenced.

Curves.—There is only one curve with a radius of less than 1,000 feet.

Gradients.—The ruling gradient between Lucknow and Bareilly is 1 in 500, except near Lucknow and Bareilly, where it is 1 in 200 ; between Mailani and Kauriálaghat, 1 in 400 and between Dudhwa and Chandan Choki, 1 in 100.

Contracts—

Main provisions of contracts— As noted under Rohilkund and Kumaon railway (3' 3¾" gauge).

ROHILKUND AND KUMAON RAILWAY SYSTEM—*contd.*

Lucknow-Bareilly railway (3′ 3⅜″ gauge)—*concld.*

Statistics of working. (Those for the periods prior to 1891 will be found in Appendix 38 to the Railway Administration Report for 1907).—

Year.	Mileage open at end of each year.	Total capital outlay, including suspense, to end of each year, *i.e.*, outlay on (i) lines open and (ii) lines partly or wholly under construction.	Gross earnings.	Net earnings.	Percentage of net earnings on total capital outlay given in column (3).	Interest.	Company's share of surplus profits (based on terms of contract) *attributable to each year.*	Gain or loss to the State *pertaining to each year.*	Earnings per mile per week.	Proportion of expenses to earnings.
1	2	3	4	5	6	7	8	9	10	11
	Miles.	Rs.	Rs.	Rs.		Rs.	Rs.	Rs.	Rs.	
1891 .	198·38	79,17,846	4,95,068	1,72,145	2·17	2,72,055	...	— 99,910	56	65·23
1892 .	198·33	81,66,804	6,82,826	2,74,601	3·36	3,07,651	10,686	— 43,686	66	59·79
1893 .	222·05	83,89,362	7,28,878	2,73,541	3·26	3,26,770	3,495	— 56,724	67	62·47
1894 .	231·17	85,93,158	9,72,269	3,94,240	4·59	3,45,323	24,180	+ 24,737	88	59·45
1895 .	231·17	87,22,466	8,25,934	3,13,116	3·59	3,56,506	15,884	— 59,314	74	62·09
1896 .	231·17	89,63,62	8,27,599	3,02,071	3·37	3,48,885	13,415	— 60,229	75	63·50
1897 .	231·17	93,02,71	8,27,371	3,35,776	3·61	3,61,550	11,570	— 37,344	75	59·42
1898 .	231·17	94,90475	10,34,088	5,00,200	5·27	3,64,852	68,058	+ 67,290	94	51·63
1899 .	231·17	94,97,48	12,72,160	6,33,355	6·67	3,65,537	1,25,640	+ 1,42,178	114	45·21
1900 .	231·17	99,21,432	12,53,801	6,51,957	6·57	3,73,097	1,34,915	+ 1,43,945	107	48·00
1901 .	231·17	1,01,83,243	13,72,520	7,58,124	7·44	3,91,796	75,769	+ 2,90,559	123	44·76
1902 .	231·17	1,12,96,019	14,53,329	7,69,568	6·81	4,23,528	67,704	+ 2,78,336	132	47·05
1903 .	237·04	1,15,01,911	14,03,266	7,48,689	6·51	4,53,825	53,222	+ 2,41,642	126	46·65
1904 .	237·04	1,17,14,505	14,96,120	7,97,671	6·81	4,48,328	61,426	+ 2,87,917	133	46·68
1905 .	237·04	1,17,99,857	15,47,488	8,20,992	6·96	4,50,448	65,048	+ 3,05,496	138	46·95
1906 .	237·04	1,20,09,658	16,55,250	8,36,782	6·97	4,57,588	65,252	+ 3,13,942	148	49·46
1907 .	237·04	1,24,59,395	16,97,182	9,07,863	7·29	4,18,611	73,229	+ 4,16,023	150	46·56
1908 .	237·04	1,27,50,545	16,15,542	7,80,747	6·12	4,50,365	48,511	+ 2,81,871	131	51·67
1909 .	237·04	1,43,82,316	17,17,491	7,84,749	5·46	4,11,131	44,700	+ 3,28,918	159	54·31
1910 .	237·04	1,60,60,757	18,25,185	10,15,746	6·32	4,75,558	80,364	+ 4,59,824	148	46·38
1911 .	257·57	1,72,02,079	19,40,488	10,44,604	6·07	5,07,263	74,720	+ 4,62,621	152	46·17
1912 .	296·32	1,83,53,912	22,67,846	13,67,532	7·45	5,66,069	1,21,033	+ 6,80,430	157	39·78
1st qr. of 1913.	296·32	1,87,59,973	6,65,878	4,06,008	2·16	1,65,812	32,297	+ 2,07,889	42	39·03
1913-14 .	298·02	1,91,90,007	22,50,319	12,45,837	6·49	6,84,031	74,936	+ 4,86,870	148	44·64
1914-15 .	312·51	2,02,30,297	19,40,856	8,79,923	4·35	7,07,583	19,655	+ 1,52,675	119	54·66
1915-16 .	312·51	2,00,77,006	20,17,355	10,15,377	5·05	7,39,732	34,141	+ 2,41,504	124	49·67
1916-17 .	312·51	1,98,31,693	23,98,560	13,90,059	7·01	7,21,881	87,524	+ 5,80,704	148	42·05
1917-18 .	312·43	1,98,54,296	27,04,857	15,02,723	7·57	7,31,984	1,03,262	+ 6,67,477	166	44·44

Powayan Light railway (2′ 6″ gauge)

The line was constructed originally by the Powayan Steam Tramway Company and the maintenance and working were taken over by the Rohilkund and Kumaon Railway Company from 17th December 1900.

Date of registration of the Company.—22nd April 1887.

Progress in opening—

Sections of railway.	Date of opening.	Miles.	Total.
1	2	3	4
Shahjahanpur to Powayan	17-6-90	17·18	
Powayan to Khotar	19-5-91	13·86	
Khotar to Mailani	22-12-94	7·82	
TOTAL	...	...	38·86

Details of construction—

Permanent-way.—The permanent-way consists of flat-footed steel rails, weighing 24-lb. to the yard, laid on sâl sleepers.

Ballast.—The line is ballasted with earth.

Fencing.—The line is unfenced except at Shahjahanpur station.

Curves.—There are no curves with a radius of less than 300 feet.

Gradients.—The line is not graded.

Local Government orders and contracts—

Powayan Steam Tramway Company Order, 1889, published under Notification by the Government of the North-Western Provinces and Oudh (now United Provinces of Agra and Oudh), No. 1808-W. R., dated the 18th December 1889, authorising the construction of a steam tramway from Shahjahanpur railway station on the Oudh and Rohilkhand railway to Khotar.

"Further Order" of the Powayan Steam Tramway Company, 1894, published under Notification by the Government of the North-Western Provinces and Oudh (now United Provinces of Agra and Oudh), No. 148—17-W. R., dated the 23rd April 1894, authorising the construction of an extension of the Powayan Steam tramway from Khotar to Mailani railway station on the Lucknow-Bareilly railway.

Contract, dated the 1st July 1901 (called the Tramway Company's contract), *between the Secretary of State and the Powayan Steam Tramway Company*, as to handing over to the Secretary of State, or to the Working Agency appointed by him, the Tramway for maintenance, management and working.

ROHILKUND AND KUMAON RAILWAY SYSTEM—*contd.*

Powayan Light railway (2′ 6″ gauge)—*concld.*

Local Government orders and contracts—*concld.*

Contract, dated the 6th November 1902 (supplemental to the contracts of 1882, 1890, 1892 and 1901, noted under Rohilkund and Kumaon railway), *between the Secretary of State and the Rohilkund and Kumaon Railway Company*, as to the maintenance, management and working of the Powayan Steam Tramway.

Contract, dated the 13th July 1906, *between the Secretary of State and the Rohilkund and Kumaon Railway Company*, as to the provision of moneys for capital expenditure, and acquisition by the Railway Company of interest in the Powayan Steam Tramway Company.

Contract, dated the 16th January 1912 (supplemental, or to be read as an annexure, to the contract of 1901), *between the Secretary of State and the Powayan Steam Tramway Company*, as to certain alterations and modifications in the provisions of clauses 2 and 18 of the contract of 1901 in regard to its determination.

Contract, dated the 17th May 1914 (supplemental, or to be read as an annexure to the contracts of 1901, 1902 and 1912), *between the Secretary of State of the first part, the Powayan Steam Tramway Company of the second part and the Rohilkund and Kumaon Railway Company of the third part* modifying the terms of the working agency agreement of 1st July 1901 as to half-yearly dates for making up the accounts.

Main provisions of Local Government orders and contracts—

(i) *Land.*—Provided at the cost of the Company, other than the portion of the provincial road which the Company is authorised to use.

(ii) *Government aid.*—The line, subject to interests acquired therein by the Rohilkund and Kumaon Railway Company, is the property of the Powayan Steam Tramway Company, and is managed, maintained and worked by the Rohilkund and Kumaon Railway Company on behalf of the Government.

(iii) *Terms of working.*—The working agency retains 70 per cent of the gross earnings of the tramway until the line is fully equipped, and thereafter the same percentage as that at which the Rohilkund and Kumaon Railway Company's "open system" is worked, subject to a minimum of 60 per cent.

[NOTE.—The percentage so retained by the working agency is in full satisfaction of the cost of petty works, rolling-stock, plant and machinery costing not more than Rs. 200, subject to the limit of Rs. 20 per mile per half-year. The cost of petty works, rolling-stock, plant and machinery exceeding these limits is to be borne by the Capital Account of the Tramway Company.]

(iv) *Distribution of profits.*—After payment of working expenses as above noted and contributions to the Working Agency's Provident Fund, the balance of the gross earnings, if any, are paid over to the Tramway Company.

(v) *Rates and fares.*—To be those from time to time applicable to the Lucknow-Bareilly railway.

(vi) *Special obligations as to the conveyance of.*—

(*a*) Mails, police, troops, high Government officials and Government stores.—
(*b*) Government bullion and coin, and the persons in charge thereof.— } Not specified.

(vii) *Power of the Government to determine contract.*—Government may terminate the contract on the 31st December 1932, or on the 31st December in any subsequent year but not earlier, on 12 months' notice given. Government may also terminate the contract at any time, on 6 months' notice, if the Company fails to observe its obligations.

Government also have the option, on giving 12 months' notice to the Tramway Company, after the Shahjahanpur-Khotar section has been open for public traffic for 15 years and the Khotar-Mailani section for 10 years, and thereafter at terms of 7 years each, to take over the tramway on paying the Tramway Company the value of the property as a dividend-earning investment at the date of giving such notice, with an additional bonus of 20 per cent over and above such value.

(viii) *Power of the Company to surrender contract.*—Nil.

(ix) *Term of contract* [*if not determined under* (vii)].—Up to the 31st December 1932.

Statistics of working. (Those for the periods prior to 1908 will be found in Appendix 38 to the Railway Administration Report for 1907).—

Year.	Mileage open at end of each year.	Total capital outlay, including suspense to end of each year, *i.e.*, outlay on (i) lines open, and (ii) lines partly or wholly under construction.	Gross earnings.	Net earnings.	Percentage of net earnings on total capital outlay given in column (3).	Earnings per mile per week.	Proportion of expenses to earnings.
1	2	3	4	5	6	7	8
	Miles.	Rs.	Rs.	Rs.		Rs.	
1908	39·50	8,94,801	81,450	32,292	3·60	40	60 35
1909	39·50	8,94,801	91,687	36,352	4·06	45	60·35
1910	39·50	8,94,801	95,236	37,799	4·22	46	60·31
1911	39·50	8,94,801	1,02,692	40,737	4·55	50	60·33
1912	39·50	8,94,801	1,01,188	40,213	4·49	49	60·26
1st qr. of 1913 . . .	39·50	8,94,801	20,797	8,262	0·92	44	60·27
1913-14	39·50	8,94,801	97,968	38,875	4·34	48	60·32
1914-15	39·50	8,94,801	82,860	33,144	3 70	40	60·00
1915-16	39·50	8,94,801	96,562	38,625	4·28	47	60·00
1916-17	38·86	8,94,801	1,00,729	39,985	4·47	49	60·30
1917-18	38·86	8,94,801	1,02,278	40,626	4·54	50	60·28

UDAIPUR-CHITORGARH RAILWAY (3' 3⅜" gauge).

The line was constructed at the expense of the Mewar Durbar, and was maintained and worked by the Bombay, Baroda and Central India Railway Company up to the 31st December 1897. With effect from 1st January 1898 the maintenance and working of the line were taken over by the Durbar.

Running powers—

Home line over Foreign line.—

	Miles.
Bombay, Baroda and Central India railway, 3' 3⅜" gauge, Berach Signal station to Chitorgarh .	1·42

Progress in opening—

Sections of railway.	Date of opening.	Miles.	Total.
1	2	3	4
Berach near Chitorgarh to Debari near Udaipur	1-8-95	60·39	
Separate station at Chitorgarh	15-8-98	0·47	
Debari to Udaipur	25-8-99	6·44	
TOTAL .	...	...	67·30

Details of construction—

Permanent-way.—The permanent-way consists of 41¼-lb. flat-footed steel rails laid on deodar sleepers.

Ballast.—The ballast consists of broken stone.

Fencing.—The line is fenced round stations and between Udaipur and Debari.

Curves.—On the Berach-Debari section the sharpest curve is of 1,146 feet radius; and on the extension from Debari to the Ahr river, near Udaipur, at the 61st mile, the sharpest curve has a radius of 820 feet.

Gradients.—The ruling gradient is 1 in 120, except on the section Debari to Udaipur where it is 1 in 100.

Contracts—

Nil.—The line is owned and worked by the Mewar Durbar.

Statistics of working. (Those for the periods prior to 1908 will be found in Appendix 38 to the Railway Administration Report for 1907).—

Year.	Mileage open at end of each year.	Total capital outlay, including suspense, to end of each year, *i.e.*, outlay on (i) lines open, and (ii) lines partly or wholly under construction.	Gross earnings.	Net earnings.	Percentage of net earnings on total capital outlay given in column (3).	Earnings per mile per week.	Proportion of expenses to earnings.
1	2	3	4	5	6	7	8
	Miles.	Rs.	Rs.	Rs.		Rs.	
1908	67·30	20,77,554	2,38,916	1,18,044	5·68	68	50·59
1909	67·30	20,96,383	2,43,050	1,24,855	5·95	69	48·62
1910 . . .	67·30	20,97,410	2,52,090	1,33,470	6·36	72	47·05
1911	67·30	21,15,951	2,84,208	1,53,302	7·24	81	46·07
1912	67·30	21,95,945	3,05,495	1,57,311	7·16	87	48·50
1st qr. of 1913 . .	67·30	22,06,086	91,789	54,629	2·48	104	40·48
1913-14 . . .	67·30	22,34,126	3,19,133	1,65,344	7·40	91	48·18
1914-15 . . .	67·30	22,40,204	2,65,532	1,07,157	4·78	76	59·64
1915-16 . . .	67·30	22,59,354	3,24,163	1,53,016	6·77	93	52·79
1916-17 . . .	67·30	22,77,052	3,75,018	1,91,999	8·43	107	48·80
1917-18 . .	67·30	22,84,476	2,76,243	1,31,248	5·75	78	52·48

AHMADPUR-KATWA RAILWAY (2′ 6″ gauge).

Date of registration of the Company.—3rd November 1915.

Sanction to the construction of this line by the Ahmadpur-Katwa Railway Company was conveyed in Railway Board's Notification No. 314, dated the 16th November 1914.

Progress in opening—

Section of railway.	Date of opening.	Miles.	Total.
1	2	3	4
Ahmadpur to Pachandi	30-5-17	24·62	
Pachandi to Katwa	29-9-17	7·64	
TOTAL . .	...	...	32·26

Details of construction—

Permanent-way.—The permanent-way consists of new 35-lb. flat-footed and 2nd hand 55-lb. rails laid on sál sleepers.

Ballast.—The line is ballasted with moorum, except in station yards and on open top bridge approaches where stone or brick ballast is used.

Fencing.—The line is unfenced.

Curves.—The sharpest curve is of 573 feet radius.

Gradients.—The ruling gradient is 1 in 200.

Contract—

The line was constructed and is being worked under the terms of a contract between the Secretary of State and the Ahmadpur-Katwa Railway Company which is under consideration.

Statistics of working—

Year.	Mileage open at end of the year.	Total capital outlay, including suspense, to end of the year, *i.e.*, outlay on (*i*) lines open and (*ii*) lines partly or wholly under construction.	Gross earnings.	Net earnings.	Percentage of net earnings on total capital outlay given in column (3).	Guaranteed interest recoverable from Government.	Total income.	Percentage of total income on total capital outlay given in column (3).	Earnings per mile per week.	Proportion of expenses to earnings.
1	2	3	4	5	6	7	8	9	10	11
	Miles.	Rs.	Rs.	Rs.					Rs.	Rs.
1917-18 .	32·26	19,50,145	54,497	—780	...	30,170	29,390	1·51	43	101·45

AMBAJI-TARANGA LIGHT RAILWAY (2′ 6″ gauge).

Date of registration of the Company.—1st September 1905.

The construction of this line by the agency of the Ambaji-Taranga Light Railway Company was authorised by the Railway Board in their letter No. 1693-R. C., dated the 8th July 1911.

Progress in opening—

Section of railway.	Date of opening.	Miles.	Total.
1	2	3	4
Varetha Junction to Baroda Frontier } (sanctioned on 8th July 1911) . . . {	...	1·64	
Baroda Frontier to Samaia . . }	...	18·86	
TOTAL .	...	...	20·50

ARAKAN LIGHT RAILWAY (2' 6" gauge).

Date of registration of the Company.—16th October 1916.

The construction of the line, from Buthidaung to Maungdaw, by the Buthidaung-Maungdaw Tramway Company having fallen through, the formation of a new Branch Line Company for taking over and completing the line was authorised in Railway Board's letter No. 19 P.-16, dated the 8th March 1916. The Company formed is known as the Arakan Light Railway Company, after which the undertaking has been named.

Progress in opening—

Section of railway.	Date of opening.	Miles.	Total.
1	2	3	4
Buthidaung to Maungdaw (sanctioned on 6th June 1911)	...	18·50	18·50

ARRAH-SASARAM LIGHT RAILWAY (2′ 6″ gauge).

Date of registration of the Company.—19th October 1909.

Progress in opening—

Sections of railway.	Date of opening.	Miles.	Total.	Remarks.
1	2	3	4	5
Arrah to Sasaram	6-3-11	60·50		
Sasaram to Tarachandi Hill	12-11-14	*4·66		*For goods traffic only.
TOTAL	...	...	65·16	

Details of construction—

Permanent-way.—The permanent-way consists of 30-lb. flat-footed steel rails on sâl sleepers.

Ballast.—The line is ballasted with broken stone.

Fencing.—The line is unfenced.

Curves.—The sharpest curve is of 573 feet radius, between Arrah and Sasaram and 150 feet between Sasaram and Tarachandi Hill.

Gradients.—The ruling gradient is 1 in 250, between Arrah and Sasaram and 1 in 100 between Sasaram and Tarachandi Hill.

Local Government orders and agreements—

The Arrah-Sasaram Tramway Company order published under the Bengal Government, Railway Department, Notification No. 39 R., dated the 12th October 1909, authorising the construction of a line from Arrah to Sasaram in the district of Shahabad.

Agreement, dated the 15th October 1909, *between the District Board of Shahabad and Messrs. Martin and Company of Calcutta (called "the Promoters") by and on behalf of the Arrah-Sasaram Light Railway Company*, as to the grant of a concession to the Company of the right to construct and work the line.

Agreement, dated the 30th October 1912 (supplemental to the agreement of 15th October 1909), *between the District Board of Shahabad and the Arrah-Sasaram Light Railway Company*; } as to the construction, maintenance and working of the extension from Sasaram to Tarachandi Hill as a part of the Arrah-Sasaram Light railway.

The Arrah-Sasaram Tarachandi Hill extension order published under the Bihar and Orissa Government, Railway Department, Notification No. 4760 R., dated the 8th September 1913 ; }

Main provisions of Local Government orders and agreements—

(i) *Land.*—Provided at the cost of the Company, except one side of the district road the free use of which is authorised.

(ii) *Aid by the Local authority.*—The District Board of Shahabad recommend and apply to the Local Government to exempt the Company from the tax on account of road cess, or to exact only a nominal tax, for a period of 21 years from the date when the line is opened for traffic, with power of renewal. The Board also guarantee to supplement the net earnings of the Company by such annual subsidy as may be necessary to allow of it paying a dividend of 4 per cent per annum on their share capital, provided that the total liability of the Board on this account in any one year shall not exceed Rs. 88,000 or the sum of 4 per cent on the Company's share capital whichever is less.

(iii) *Distribution of profits.*—Surplus profits in excess of 4 per cent on the capital for the time being of the Company are divisible equally between the District Board of Shahabad and the Company.

(iv) *Rates and fares.*—Certain maximum rates of fares for passengers and the adoption of the General Classification of goods with separate maximum and minimum rates for goods of the different classes have been prescribed. Full control over charges of all kinds is reserved to the Local Government.

(v) *Special obligations as to the conveyance of.*—

(*a*) Mails, postal officers and servants on duty.—To be conveyed at the rates and on the conditions in force from time to time on State railways.

(*b*) Troops, police, high Government officials and Government stores.— } *Nil.*

(*c*) Government bullion and coin, and the persons in charge thereof.— }

(vi) *Power of the Local authority to determine agreement.*—Upon the expiration of 21 years from the date of the Local Government order authorising the construction of the line, or at the end of every 7 years thereafter, the District Board have, by giving six months' previous notice, the right of purchasing the line by paying to the Company 25 times the yearly average net earnings of the 3 years preceding the purchase, subject to a maximum of 120 and a minimum of 100 per cent of the capital cost.

ARRAH-SASARAM LIGHT RAILWAY (2′ 6″ gauge)—*concld.*

Main provisions of Local Government orders and Agreements—*concl d.*

(vii) *Power of the Company to surrender agreement.*—Nil.

(viii) *Term of agreement* [*if not determined under* (vi)].—Not specified.

Statistics of working—

Year.	Mileage open at end of each year.	Total capital outlay, including suspense, to end of each year, *i.e.*, outlay on (i) lines open and (ii) lines partly or wholly under construction.	Gross earnings.	Net earnings.	Percentage of net earnings on total capital outlay given in column (3).	Subsidy from (#), or share of surplus profits to (—), the District Board.	Total income [column 5+ column 7]	Percentage of total income on total capital outlay given in column (3).	Earnings per mile per week.	Proportion of expenses to earnings.
1	2	3	4	5	6	7	8	9	10	11
	Miles.	Rs.	Rs.	Rs.		Rs.	Rs.		Rs.	
1911 .	60·50	20,75,772	1,33,386	44,286	2·13	+15,581	59,867	2·88	45	66·79
1912 .	60·50	21,98,127	1,72,469	59,379	2·71	+21,805	81,184	3·69	54	65·54
1st qr. of 1913. .	60·50	22,05,708	45,682	16,472	0·75	+4,681	21,153	0·95	58	63·94
1913-14 .	60·50	22,31,435	1,94,799	71,403	3·20	+17,932	89,335	4·00	61	63·37
1914-15 .	65·26	22,74,782	2,12,951	88,320	3·88	+253	88,573	3·89	65	58·50
1915-16 .	65·16	22,88,079	1,96,050	79,328	3·46	+13,256	92,584	4·04	58	59·01
1916-17 .	65·16	22,67,336	2,26,342	1,00,239	4·42	...	1,00,239	4·42	67	55·70
1917-18 .	65·16	22,67,557	2,53,527	1,36,341	6·01	—7,394	1,28,947	5·68	74	46·22

BANGALORE-CHIK BALLAPUR LIGHT RAILWAY (2′ 6″ gauge).

This railway is an enterprise by an Indian Company floated for the purpose under a guarantee from the Mysore Durbar of 4 per cent per annum on the subscribed capital. Its construction was sanctioned by the Secretary of State for India in his Despatch No. 75 Railway, dated the 10th September 1909. As the Company was unable to raise the entire capital, the Durbar undertook to advance the balance of capital as joint owners of the railway and gave the Company the option of paying back the amount later on.

Running power—

Home line over foreign line—

	Miles.
Yesvantpur to Yelahanka, Madras and Southern Mahratta (3′ 3⅜″ gauge) railway, with the help of a 3rd rail.	6·35

Progress in opening—

Sections of railway.	Date of opening.	Miles.	Total.	Remarks.
1	2	3	4	5
Bangalore City to Yesvantpur	7-1-18	3·50		
Yesvantpur to Yelahanka	1-2-17	*6·50		*This is on a mixed (3′ 3⅜″ and 2′ 6″) gauge.
Yelahanka to Devanhalli	15-9-14	14·51		
Devanhalli to Chik Ballapur	1-8-15	14·23		
TOTAL OPEN MILEAGE	...	...	38·74	

Details of construction—

Permanent-way.—The permanent-way consists of second-hand 41¼ lb. flat-footed steel rails, purchased from the Madras and Southern Mahratta Railway Company, laid on steel sleepers. Teak sleepers have been used in station yards.

Ballast.—The line is for the present packed upon gravel ballast.

Fencing.—The line is unfenced.

Curves.—The sharpest curve is of 1,146 feet radius.

Gradients.—The steepest gradient is 1 in 100.

Agreement—

The line has been constructed and is being worked by the Mysore Durbar on behalf of the Company under the terms of an agreement which is under consideration.

Statistics of working—

Year.	Mileage open at end of each year.	Total capital outlay, including suspense, to end of each year, *i.e.*, outlay on (*i*) lines open and (*ii*) lines partly or wholly under construction.	Gross earnings.	Net earnings.	Percentage of net earnings on total capital outlay given in column (3).	Earnings per mile per week.	Proportion of expenses to earnings.
1	2	3	4	5	6	7	8
	Miles.	Rs.	Rs.	Rs.		Rs.	
1914-15	14·72	7,80,104	Information not available.			...	...
1915-16	28·65	10,18,730	52,503	18,397	1·81	35	64·96
1916-17	35·24	9,11,740	71,660	16,826	1·79	39	77·21
1917-18	38·74	11,57,634	1,04,642	33,132	2·86	56	68·34

BANKURA-DAMOODAR RIVER RAILWAY (2′ 6″ gauge).

Date of registration of the Company.—30th March 1914.

Sanction to the construction of this line by the Bankura-Damoodar River Railway Company was conveyed in Railway Board's Notification No. 103, dated the 1st May 1914.

Progress in opening—

Sections of railway.	Date of opening.	Miles.	Total.
1	2	3	4
Bankura to Indas	15-12-16	42·34	
Indas to Fakirpur	1-4-17	11·66	
Fakirpur to Rainagar	6-6-17	5·95	
TOTAL	...	...	59·95

Details of construction—

Permanent-way.—The permanent-way consists of 35-lb. flat-footed British standard section rails laid on sâl sleepers.

Ballast.—Moorum is used on embankment and brick in cuttings.

Fencing.—The line is unfenced.

Curves.—The sharpest curve in station yards has a radius of 573 feet.

Gradients.—The ruling gradient is 1 in 150.

Contract—

The line was constructed, and is being worked, under the terms of a contract, between the Secretary of State and the Bankura-Damoodar River Railway Company, which is under consideration.

Statistics of working—

Year.	Mileage open at end of each year.	Total capital outlay, including suspense, to end of each year, *i.e.*, outlay on (*i*) lines open and (*ii*) lines partly or wholly under construction.	Gross earnings.	Net earnings.	Percentage of net earnings on total capital outlay given in column (3).	Guaranteed interest recoverable from Government.	Total income.	Percentage of total income on total capital outlay given in column (3).	Earnings per mile per week.	Proportion of expenses to earnings.
1	2	3	4	5	6	7	8	9	10	11
	Miles.	Rs.	Rs.	Rs.					Rs.	
1916-17	42·69	33,93,875	22,483	2,485	0·07	...	...	...	10	88·92
1917-18	59·95	35,57,279	1,28,046	6,928	0·19	59,489	66,417	1·87	41	94·53

BARASET-BASIRHAT LIGHT RAILWAY (2′ 6″ gauge).

Date of registration of the Company.—30th July 1903.

Progress in opening—

Sections of railway.	Date of opening.	Miles.	Total	Grand total.
1	2	3	4	5
Main line—				
Baraset to Basirhat	1-2-05	26·00		
Basirhat to Chingrighata	2-3-09	8·50		
			34·50	
Shambazar branch—				
Beliaghata Bridge to Pattipooker	16-2-10	16·62		
Pattipooker to Belgatchia (Shambazar)	12-10-14	1·12		
			17·74	
GRAND TOTAL	...	...	...	52·24

Details of construction—

Permanent-way.—The permanent-way consists of 30-lb. flat-footed steel rails on pynkado, sál and Australian jarrah wood sleepers.

Ballast.—The line is ballasted with broken brick.

Fencing.—The line is unfenced.

Curves.—The sharpest curve has a radius of 400 feet.

Gradients.—The ruling gradient is 1 in 250.

Agreements and Local Government orders—

Agreement, dated the 14th December 1897 (called the principal agreement), *between the District Board of the 24-Parganas and Messrs. Martin and Company on behalf of the Baraset-Basirhat Tramway Company, Limited*, as to the grant of a concession to the Tramway Company by the District Board;

Agreement, dated the 14th May 1902 (supplemental to the agreement of 1897), *between the District Board of the 24-Parganas and Messrs. Martin and Company on behalf of the Baraset-Basirhat Tramway Company, Limited*, modifying clause 4 of the agreement of 1897;

The Baraset-Basirhat Tramway Company order, published under the *Bengal Government, Railway Department, Notification No. 86 R., dated the 15th May 1903*;

} as to the construction, maintenance and working of the line from Baraset to Basirhat.

Agreement, dated the 3rd August 1903, *between the District Board of the 24-Parganas, Messrs. Martin and Company and the Baraset-Basirhat Light Railway Company, Limited*, as to the adoption as between the Board and the new Railway Company of the agreement of 1897 as modified by the agreement of 1902, and as to the discharge of the Promoters from all liability thereunder or in respect thereof.

Agreement, dated the 6th November 1907 (supplemental to the agreements of 1897, 1902 and 1903), *between the District Board of the 24-Parganas and the Baraset-Basirhat Light Railway Company, Limited*;

The Baraset-Basirhat-Taki Extension order, published under the *Bengal Government, Railway Department, Notification No. 22 R., dated the 23rd November 1907*;

} as to the construction, maintenance and working of the extension from Basirhat to Taki and Hosanabad as a part of the Baraset-Basirhat Light railway.

Agreement, dated the 21st December 1908 (supplemental to the agreements of 1897, 1902, 1903 and 1907), *between the District Board of the 24-Parganas and the Baraset-Basirhat Light Railway Company, Limited*;

The Baraset-Basirhat-Pattipooker Extension order, published under the *Bengal Government, Railway Department, Notification No. 9 R., dated the 19th February 1909*;

} as to the construction, maintenance and working of an extension from Beliaghata bridge to Pattipooker, as part of the Baraset-Basirhat Light railway.

BARASET-BASIRHAT LIGHT RAILWAY (2' 6" gauge)—*concld.*

Agreements and Local Government orders—*concld.*

Agreement, dated the 7th August 1914 (supplemental to the aforesaid agreements) *between the District Board of the 24 Parganas and the Baraset-Basirhat Light Railway Company, Limited*;
The Baraset-Basirhat-Belgatchia extension order, published under the *Bengal Government, Railway Department Notification No. 12 R., dated the 15th August 1914.*

} as to the construction, maintenance and working of an extension from Pattipooker to Belgatchia as part of the Baraset-Basirhat Light Railway.

Main provisions of agreements and Local Government orders—

(i) *Land.*—Land, other than portions of the Calcutta-Jessore Road and the District Road between Baraset and Taki, the free use of which in perpetuity is authorised by the Local Government and the District Board, respectively, provided at the cost of Company's capital.

(ii) *Aid by the District Board.*—The District Board recommend and apply to the Local Government either to exempt the Company from the road cess or to exact only a nominal tax for a period of 21 years from the date when the line is opened for traffic, with power of renewal. The District Board also guarantee such an annual subsidy as may be necessary to make the net profits of the Company equal to Rs. 1,500 per mile of line open, provided that the total contribution by the Board does not exceed Rs. 38,000 per annum, being 4 per cent on the amount of the Company's share capital.

(iii) *Distribution of profits.*—Surplus profits in excess of 4 per cent on the Company's share capital are divisible equally between the District Board and the Company.

(iv) *Rates and fares.*—Certain maxima fares for passengers, and a tariff of charges for goods have been fixed. Full control over charges of all kinds is reserved to the Local Government.

(v) *Special obligations as to the conveyance of.*—

(*a*) Mails and postal officers and servants on duty.—At the rates and on the conditions in force from time to time on State railways.

(*b*) Troops, police, high Government officials and Government stores.
(*c*) Government bullion and coin, and the persons in charge thereof.
} Nil.

(vi) *Power of the District Board to determine agreement.*—Upon the expiration of 21 years from the date of the Local Government order authorising the construction of the line, or at the end of every 7 years thereafter, the District Board, by giving 6 months' notice, can purchase the undertaking by paying to the Company 20 times the average net annual profits of the 4 years preceding the transaction, together with a bonus of 20 per cent thereon.

(vii) *Power of the Company to surrender agreement.*—Nil.

(viii) *Term of agreement [if not determined under* (vi) *].*—Not specified.

Statistics of working (Those for the periods prior to 1908 will be found in Appendix 38 to the Railway Administration Report for 1907.)—

Year.	Mileage open at end of each year.	Total capital outlay, including suspense, to end of each year, i.e., outlay on (*i*) lines open and (*ii*) lines partly or wholly under construction.	Gross earnings.	Net earnings.	Percentage of net earnings on total capital outlay given in column (3).	Subsidy from, (+), or share of surplus profits to, (—), the District Board.	Total income.	Percentage of total income on total capital outlay given in column (3).	Earnings per mile per week.	Proportion of expenses to earnings.
1	2	3	4	5	6	7	8	9	10	11
	Miles.	Rs.	Rs.	Rs.		Rs.	Rs.		Rs.	
1908 .	26·06	10,52,939	1,49,043	58,588	5·56	—5,944	52,644	5·00	110	60·69
1909 .	34·50	14,20,827	1,73,715	69,303	4·88	—6,478	62,825	4·42	97	60·45
1910 .	51·12	21,80,982	2,35,676	73,310	3·36	—674	72,656	3·33	88	69·89
1911 .	51·12	22,12,771	2,78,247	1,12,198	5·07	—6,356	1,05,842	4·78	105	59·67
1912 .	51·12	22,42,897	3,38,314	1,62,421	7·24	—23,668	1,38,753	6·18	127	51·99
1st qr. of 1913.	51·12	22,46,018	90,886	38,007	1·69	—4,489	33,518	1·49	136	58·18
1913-14 .	51·12	23,18,116	3,28,574	1,36,598	5·91	—16,052	1,20,546	5·22	124	58·42
1914-15 .	52·24	23,99,927	3,48,960	1,33,617	5 56	—10 348	1 23.269	5·14	128	61·71
1915-16 .	52·24	23,80,575	3,74,4·0	1,52,380	6 40	—16,011	1,36,369	5 73	138	59·31
1916 17 .	52·24	23,81,789	3,57,024	1,35,415	5·69	—12,982	1,22,433	5·14	131	62·07
1917-18 .	52·24	23,85,399	3,08,313	92,779	3·89	—2,6·4	90,154	3·77	113	69·90

BARSI LIGHT RAILWAY (2' 6"gauge).

Chairman.—G. A. Anderson, Esq.
Secretaries—W. A. Browne & Co.
Offices.—Winchester House, Old Broad Street, London, E.C.
Date of registration of the Company.—11th July 1895.

Progress in opening—

Sections of railway.	Date of opening.	Miles.	Total.	Grand total.
1	2	3	4	5
Main line—				
Kurduvadi to Barsi Town	1-3-97	21·59	21·59	
Extensions in British territory—				
Barsi Town to Kuslamb	15-6-05	6·34		
Kuslamb to Tadwale	1-5-06	20·36	26·70	
Kurduvadi to 1·78 miles from Pandharpur Town	2-12-06	30·56		
1·78 miles from Pandharpur Town to Pandharpur Town	16-7-15	1·78	32·34	
Tadwale to Hyderabad Frontier	1-5-11	1·00	1·00	
Extension in Nizam's territory—				
Hyderabad Frontier to Latur	1-5-11	35·87	35·87	
GRAND TOTAL	...	...	...	117·50

Details of construction—

Permanent-way.—The permanent-way consists of 35-lb. flat-footed steel rails on steel sleepers.

Ballast.—The line is ballasted with stone and moorum.

Fencing.—The line is unfenced, except at station yards and for a short distance on either side of level crossings and at a few bridges.

Curves.—The sharpest curve is of 425 feet radius.

Gradients.—The ruling gradient is 1 in 100. There are, however, two steeper gradients on the original line (from Kurduvadi Junction to Barsi Town) one of 1 in 89 and one of 1 in 90; and two on the Tadwale Extension—one of 1 in 50 and the other of 1 in 70.

Contracts and agreements—

Contract, dated the 1st August 1895, *between the Secretary of State and the Barsi Light Railway Company*, as to the construction, maintenance and working of the line from Barsi Road Junction to Barsi Town (called "the Barsi Town railway").

Contract, dated the 26th August 1902, *between the Secretary of State and the Barsi Light Railway Company*, as to the construction, maintenance and working of "the Pandharpur extension" and "the Tadwale extension," as modified by letter *from the India Office to the London Board of the Barsi Light Railway Company*, No. P.W. 1020, dated the 22nd June 1904, extending to 1944 the term at the end of which the option of purchase of the Company's undertaking may be exercised by the Government under clause 59 of the contract.

Contract, dated the 28th May 1903 (supplemental to those of 1895 and 1902), *between the Secretary of State and the Barsi Light Railway Company*, as to the adoption of 1*s.* 4*d.* as the "prescribed" rate of exchange.

Contract, dated the 4th December 1905 (supplemental to that of 1902), *between the Secretary of State and the Barsi Light Railway Company*, as to the construction, maintenance and working of the Pandharpur and Tadwale Extensions, and for the issue of Debenture Stock.

Contract, dated the 31st March 1909 (supplemental to the contracts of 1902, 1903 and 1905), *between the Secretary of State and the Barsi Light Railway Company*, as to the construction, maintenance and working, and the inclusion in "the Tadwale Extension," of the railway from Tadwale to the frontier of the Hyderabad State (called "the Hyderabad Frontier Extension"), near Latur in that State.

Agreement, dated the 21st April 1909, *between the Government of His Highness the Nizam of Hyderabad and the Barsi Light Railway Company*, as to the construction, maintenance and working of a railway from the frontier of the Hyderabad State to Latur in that State, known as the Latur extension.

Agreement, dated the 4th May 1909, *between His Highness the Nizam's Guaranteed State Railway Company and the Barsi Light Railway Company*, as to the former waiving, in favour of the latter, its preferential right to construct and work the railway from the frontier of the Hyderabad State to Latur in that State, known as the Latur extension.

Contract, dated the 7th October 1913 (supplemental to the contracts of 1902, 1903, 1905 and 1909) *between the Secretary of State and the Barsi Light Railway Company*, as to the extension of the Company's existing line from Barsi town to Pandharpur station on the north bank of the Bhima river to the town of Pandharpur.

Contract, dated the 24th February 1914 (supplemental to the contracts of 1895, 1902, 1903, 1905, 1909 and 1913) *between the Secretary of State and the Barsi Light Railway Company*, as to the adoption of the Government Financial year for the purposes of accounts.

Contract, dated the 8th August 1916 (supplemental to the contracts of 1902, 1903, 1905, 1909, 1913 and 1914), *between the Secretary of State and the Barsi Light Railway Company*, as to the proposed construction and working of railways from Pandharpur to Lonand and Miraj.

Contract, dated the 19th September 1917 (supplemental to the contract of 1895), *between the Secretary of State and the Barsi Light Railway Company*, whereby the Company is leased in part from liability for maintenance and repair of provincial road on surrender of right to manage and appropriate collection of tolls on the said road.

Contract, dated the 16th October 1917 (supplemental to the contracts of 1895, 1902, 1903, 1905, 1909, 1913, 1914, 1916, and 1917), *between the Secretary of State and the Barsi Light Railway Company* by which (subject to certain reservations) the date for the first possible determination of the Company's contract for those portions of the line, which are in British territory, is extended from 1944 to 1954.

BARSI LIGHT RAILWAY (2' 6" gauge)—*concld.*

Main provisions of contracts and agreements—

(i) *Land.*—In the case of the main line the Company are allowed the use of part of the road between Barsi Town and Barsi Road Junction station, any land required outside the road being acquired, at the expense of the Company. For the extensions, land in British territory has been provided by the British Government; that in the Hyderabad State by the Government of His Highness the Nizam, free of cost to the Company.

(ii) *Government aid.*—Nil.

(iii) *Distribution of profits.*—The whole to go to the Company.

(iv) *Rates and fares.*—Certain maxima have been fixed, within which the Company are permitted to vary their rates. On the Extensions the goods classification in force on the Great Indian Peninsula railway is to be adopted. In addition to the above, the Company shall be entitled to charge a pontage on passenger and goods traffic crossing the Bhima river subject to certain conditions.

(v) *Special obligations as to the conveyance of—*

(*a*) Mails, troops, police, high Government officials and Government stores.
(*b*) Government bullion and coin, and the persons in charge thereof.

} To be conveyed upon the extensions in British territory at the same rates and fares, and on the same general conditions, as may be in force on State railways. On the main line, except services for the Postal Department which are rendered at the same rates and fares and on the same general conditions as may be in force on State railways, no special provision is made for the conveyance of troops police, high Government officials, etc. The Company have since agreed to carry Military traffic over the main line at the same rates and fares as are in force on the extensions under the special contracts relating to them (vide Agent's letter No. 1471, dated the 20th October 1917). On the extension in the Nizam's territory, mails and postal officials of the Nizam's Government and the Government of India are carried free of charge. Troops, police, high Government officials, etc., of the two Governments are conveyed at special rates.

(vi) *Power of the Government to determine contract.*—The Government may determine the contract on the 1st January 1944, or at the expiration of any subsequent period of 10 years, by giving 12 months' notice. But if the projected lines from Pandharpur to Lonand and Miraj respectively shall be duly constructed by the Company in accordance with the terms of the Contract, dated the 8th August 1916, the first date on which the Company's contracts may be terminated shall be altered from the 1st January 1944 to the 1st January 1954. If the contract is so determined, the Government to pay the Company in England in sterling a sum such as, when added to any unspent capital, shall amount to the total paid up capital expended with the authority of the Government. His Highness the Nizam's Guaranteed State Railways Company have the option of purchasing the length of the line (excluding rolling stock, workshop machinery and stores) from the frontier of the Hyderabad State to Latur in that State, subject in all respects to the rights of the Nizam's Government under the agreement between His Highness' Government and the Barsi Light Railway Company and also under the several contracts between His Highness' Government and the Nizam's Guaranteed State Railways Company, after the expiration of 20 years from the date of its opening throughout for traffic, on giving 12 months' notice, at a price which shall be 5 per cent in excess of the actual capital expenditure. In the event of His Highness the Nizam's Guaranteed State Railways Company not exercising this right, His Highness the Nizam's Government have the right, on giving 12 months' notice, to purchase the same line at any time after the expiration of twenty years from the date of its opening, at a price which shall be 5 per cent in excess of the actual capital expenditure.

(vii) *Power of the Company to surrender contract.*—Nil.

(viii) *Term of contract* [*if not determined under* (vi)].—Not specified.

Statistics of working. (Those for the periods prior to 1908 will be found in Appendix 38 to the Railway Administration Report for 1907.)—

Year.	Mileage open at end of each year.	Total capital outlay, including suspense, to end of each year, *i.e.*, outlay on (*i*) lines open and (*ii*) lines partly or wholly under construction.	Gross earnings.	Net earnings.	Percentage of net earnings on total capital outlay given in column (3).	Earnings per mile per week.	Proportion of expenses to earnings.
1	2	3	4	5	6	7	8
	Miles	Rs.	Rs.	Rs.		Rs.	
1908 .	78·50	48,29,287	4,31,002	1,72,063	3·36	105	60·08
1909 .	78·50	57,13,286	6,44,775	3,85,578	6·82	158	40·58
1910 .	78·50	61,33,032	6,97,520	3,89,427	6·52	174	44·18
1911 .	115·84	68,96,322	7,44,733	3,98,877	5·79	124	46·44
1912 .	115·84	70,14,477	10,31,325	5,66,671	8·08	171	45·05
1st qr. of 1913 .	115·84	70,09,214	3,09,586	1,86,976	2·67	206	39·60
1913-14 .	115·84	71,46,903	13,18,673	8,46,882	11·85	219	35·78
1914-15 .	115·84	79,93,731	11,17,797	6,28,070	7·87	186	43·81
1915-16 .	117·50	85,69,232	10,66,669	5,96,646	6·96	175	44·05
1916-17 .	117·50	85,47,194	11,24,923	6,44,362	7·54	184	42·73
1917-18 .	117·50	86,02,814	8,60,524	4,15,265	4·83	144	51·75

BENGAL PROVINCIAL RAILWAY SYSTEM

Lines comprised in the system—

The Bengal Provincial railway system is made up of—

	Miles.
(*a*) Bengal Provincial railway (2′ 6″ gauge)	33·27
(*b*) Dasghara-Jamalpurgunj railway (2′ 6″ gauge)	8·31
Total	41·58

Bengal Provincial railway (2′ 6″ gauge)—

Date of registration of the Company.—1890.

Progress in opening—

Sections of railway.	Date of opening.	Miles.	Total.
1	2	3	4
Tarkessur to Rudrani	7-11-94	12·50	
Rudrani to Magra	8-3-95	18·62	
Magra to Tribeni	14-4-04	2·15	
TOTAL	..	...	33·27

Details of construction—

Permanent-way.—The permanent-way of the main line consists of 30-lb. flat-footed steel rails laid for 10 miles on steel transverse sleepers and for the remainder on pynkado sleepers. The Tribeni extension is laid on sâl sleepers.

Ballast.—Sand and broken brick.

Fencing.—The line is partially fenced.

Curves.—The sharpest curve is of 716·25 feet radius.

Gradients.—The ruling gradient on the main line is 1 in 1,000; there are short gradients of 1 in 500 to 1 in 700 at bridge approaches; from the bridge under the East Indian railway to Magragunj station, the line is on a gradient of 1 in 350. The ruling gradient on the Tribeni extension is 1 in 500.

Agreements and Local Government order—

Agreement, dated the 16th October 1890, *between the District Board of Hooghly and the Promoters of the Bengal Provincial Railway Company*, scheduled to the order quoted below;

The Bengal Provincial Railway Company order, published under the Bengal Government, Railway Department, Notification No. 1, dated the 4th January 1896;

} as to the construction maintenance and working of the line from Tarkessur to Magra.

Agreement, dated the 12th March 1904, *between the Secretary of State and the Bengal Provincial Railway Company*, as to the construction, maintenance and working of the extension from Magra station to Tribeni bathing ghat on the Hooghly river.

Main provisions of agreements and Local Government order—

(i) *Land.*
(ii) *Government aid.*

} Land required for the purposes of the main line, from Tarkessur to Magra acquired by the Government of Bengal at the cost of the Company; and that for the extension from Magra station to Tribeni Ghâts on the Hooghly river provided by Government free from rent or other charges.

(iii) *Distribution of profits.*—The profits go to the Company.

(iv) *Rates and fares.*—Certain maximum fares for passengers and maximum and minimum rates for goods traffic, combined with the General Classification of goods of the Indian Railway Conference Association, which are usual on Indian 5′ 6″ gauge railways, have been fixed. Full control over charges of all kinds is reserved to the Local Government.

(v) *Special obligations as to the conveyance of—*

(*a*) Mails, Postal officers and servants on duty.—To be conveyed at the rates and on the conditions in force from time to time on State railways.

(*b*) Troops, police, high Government officials and Government stores.
(*c*) Government bullion and coin, and the persons in charge thereof.

} *Nil.*

BENGAL PROVINCIAL RAILWAY SYSTEM—*concld.*

Bengal Provincial railway (2′ 6″ gauge)—*concld.*

Main provisions of agreements and Local Government order—*concld.*

(vi) *Power of the Local Authority to determine agreement.*—In the event of the District Board of Hooghly wishing to purchase the railway at the end of 21 years after the date of the Government order sanctioning the construction of the railway, or at the end of every 7 years thereafter, the promoters bind themselves to make it over at a price two-fifths in excess of the original capital outlay.

(vii) *Power of the Company to surrender agreement.*—Nil.

(viii) *Term of agreement* [*if not determined under* (vi)].—None specified.

Statistics of working (Those for the periods prior to 1908 will be found in Appendix 38 to the Railway Administration Report for 1907.)—

Year.	Mileage open at end of each year.	Total capital outlay, including suspense, to end of each year, i. e, outlay on (i) lines open and (ii) lines partly or wholly under construction	Gross earnings.	Net earnings.	Percentage of net earnings on total capital outlay given in column (3).	Earnings per mile per week.	Proportion of expenses to earnings.
1	2	3	4	5	6	7	8
	Miles.	Rs.	Rs.	Rs.		Rs.	
1908	33·27	10,93,192	1,13,074	30,482	2·79	65	73·04
1909	33·27	11,06,707	1,24,182	37,915	3·43	72	69·46
1910	33·27	11,32,454	1,24,373	43,085	3·80	72	65·36
1911							
1912	33·27	11,32,071	1,26,287	42,866	3·79	73	66·05
1st qr. of 1913 . .	33·27	11,45,721	1,30,561	48,715	4·25	75	62·69
1913-14	33·27	11,53,264	34,171	11,585	1·00	79	66·10
1914-15	33·27	11,55,833	1,43,439	46,813	4·05	78	65·15
	33·27	11,77,092	1,42,956	47,446	4·03	82	66 81
1915-16 . . .	33·27	11,85,224	1,40,725	44,784	3·78	81	68·18
1916-17	33·27	11,89,222	1,27,795	33,168	2·79	73	74·04
1917.18	33.27	11,97,510	1,08,861	11,915	1·00	63	89·03

Dasghara-Jamalpurgunj railway (2′ 6′ gauge)—

Sanction to the construction of this line by the Bengal Provincial Railway Company was conveyed in Railway Board's Notification No. 38, dated the 17th February 1915.

Progress in opening—

Section of railway.	Date of opening.	Miles.	Total.
1	2	3	4
Dasghara to Jamalpurgunj	1-9-17	8·31	8·31

Details of construction—

Permanent-way.—The permanent-way consists of 30-lb. and 41¼-lb. flat-footed steel rails on sal sleepers,

Ballast.—The line is unballasted.

Fencing.—The line is unfenced.

Curves.—The sharpest curve is of 955 feet radius.

Gradients.—The ruling gradient is 1 in 500.

Agreement—

The line has been constructed and is being maintained, managed and worked by the Bengal Provincial Railway Company under the terms of an agreement which is under consideration.

Statistics of working—

Year.	Mileage open at end of the year.	Total capital outlay including suspense, to end of the year, i. e., Outlay on (i) lines open and (ii) lines partly or wholly under construction.	Gross earnings.	Net earnings.	Percentage of net earnings on total capital outlay given in column (3).	Earnings per mile per week.	Proportion of expenses to earnings.
1	2	3	4	5	6	7	8
	Miles.	Rs.	Rs.	Rs.	Rs.		
1917-18 .	8·31	2,46,025	5,003	2,084	0·83	20	5·94

BUKHTIARPUR-BIHAR LIGHT RAILWAY (2′ 6″ gauge).

Date of registration of the Company.—19th July 1901.

Progress in opening—

Sections of railway.	Date of opening.	Miles.	Total.
1	2	3	4
Bukhtiarpur on the East Indian railway to Bihar	1-7-03	18·50	
Bihar to Silao	17-7-09	9·50	
Silao to Rajgir	1-11-11	5·00	
TOTAL	...	...	33·00

Details of construction—

Permanent-way.—The permanent-way consists of 30-lb. flat-footed steel rails laid on pynkado and sal sleepers, except for 5 miles, between Silao and Rajgir, which are laid with 25-lb. flat-footed rails on sâl sleepers.

Ballast.—The ballast consists of broken stone, except in the first few miles where a portion of the packing has been done with broken brick.

Fencing.—The line is unfenced.

Curves.—The sharpest curve has a radius of 260 feet.

Gradients.—The grades are easy, except at bridge approaches and up through the villages of Chero and Rajgir where the grade is 1 in 100.

Agreements and Local Government orders—

Agreement, dated the 21st August 1899, *between the District Board of Patna and Messrs. Martin and Company of Calcutta, the Promoters, on behalf of the Bukhtiarpur-Bihar Light Railway Company*;

The Bukhtiarpur-Bihar Tramway Company order published under the *Bengal Government, Railway Department, Notification No. 100 R., dated the 25th June 1901*;

Agreement, dated the 16th August 1901, *between Messrs. Martin and Company of Calcutta and the Bukhtiarpur-Bihar Light Railway Company*;

} As to the construction, maintenance and working of the Bukhtiarpur-Bihar Light railway.

Agreement, dated the 17th February 1904, *between the District Board of Patna and the Bukhtiarpur Bihar Light Railway Company*, as to the use of land for a siding at Bihar.

Agreement, dated the 2nd June 1908 (supplemental to the agreements of 1899 and 1901), *between the District Board of Patna and the Bukhtiarpur-Bihar Light Railway Company*;

The Bukhtiarpur-Bihar Extension order published under the *Bengal Government, Railway Department, Notification No. 11 R., dated the 15th June 1908*;

} As to the construction, maintenance and working of the extension of the Bukhtiarpur-Bihar Light railway from Bihar to Silao.

The Bukhtiarpur-Bihar-Rajgir extension order published under the *Bengal Government, Railway Department, Notification No. 20 R., dated the 14th November 1911*;

Agreement, dated the 28th November 1911 (supplemental to the agreements of 1899, 1901 and 1908), *between the District Board of Patna and the Bukhtiarpur-Bihar Light Railway Company*;

} As to the construction, maintenance and working of the extension of the Bukhtiarpur-Bihar Light railway from Silao to Rajgir.

Main provisions of agreements and Local Government orders—

(i) *Land.*—The District Board of Patna grant to the Bukhtiarpur-Bihar Light Railway Company in perpetuity, subject to their right of purchasing the line [as in (vi) below], the free use of so much of the side portion of the District Board road between Bukhtiarpur and Rajgir as is necessary, but not exceeding a width of eight feet, for the purpose of the railway; and promote the acquisition of any additional land required outside the boundary of the said road at the cost of the Company.

(ii) *Aid by the Local Authority.*—The District Board of Patna will recommend and apply to the Local Government either to exempt the Bukhtiarpur-Bihar Light Railway Company from the tax on account of road cess or to exact only a nominal tax for a period of twenty-one years from the date when the line is opened for traffic, with power of renewal. The Board also guarantee to supplement the net earnings of the Company by such annual subsidy as may be necessary to allow of the Company paying a dividend of 4 per cent per annum on their share capital, provided that the total liability of the Board on this account in any one year shall not exceed Rs. 32,000 or the sum of 4 per cent on the Companys' share capital.

(iii) *Distribution of profits.*—Any surplus profits in excess of 4 per cent, after setting aside such sums as the Directors may decide, on the capital for the time being of the Railway Company, are to be equally divided between the District Board of Patna and the Company.

BUKHTIARPUR-BIHAR LIGHT RAILWAY (2′ 6″ gauge)—*concld.*

Main provisions of agreements and Local Government orders—*concld.*

(iv) *Rates and fares.*—Certain maximum rates of fares for passengers and tariff of charges for goods have been fixed. Full control over charges of all kinds is reserved to the Local Government.

(v) *Special obligations as to the conveyance of.*—

(*a*) Mails, troops, police, high Government officials and Government stores.—
(*b*) Government bullion and coin, and the persons in charge thereof.— } Nil.

(vi) *Power of the Local Authority to determine agreement.*—Upon the expiration of 21 years, from the date of the Local Government order authorising the construction of the line, or at the end of every seven years thereafter, the District Board of Patna have, by giving six months' previous notice, the right of purchasing the line by paying to the Company the value calculated at twenty years' purchase of the average net annual profits of the Company during the four years preceding the transaction together with a bonus of 20 per cent thereon.

(vii) *Power of the Company to surrender agreement.*—Nil.

(viii) *Term of agreement.*—None specified.

Statistics of working (Those for the periods prior to 1908 will be found in Appendix 38 to the Railway Administration Report for 1907)—

Year.	Mileage open at end of each year.	Total capital outlay, including suspense, to end of each year, *i.e.*, outlay on (*i*) lines open and (*ii*) lines partly or wholly under construction.	Gross earnings.	Net earnings.	Percentage of net earnings on total capital outlay given in column (3).	Subsidy from, (+), or share of surplus profits to, (—), the District Board.	Total income [column 5 + or — column 7].	Percentage of total income on total capital outlay given in column (3).	Earnings per mile per week.	Proportion of expenses to earnings.
1	2	3	4	5	6	7	8	9	10	11
	Miles.	Rs.	Rs.	Rs.		Rs.	Rs.		Rs.	
1908 . . .	18·50	9,00,878	1,10,152	45,122	5·01	—1,915	43 207	4·80	114	59·04
1909 . . .	28·00	11,96,973	1,52,322	53,331	4·87	—5,198	53,133	4·44	128	61·70
1910 . . .	28·00	12,01,403	1,23,986	54,564	4·54	—3,421	51,143	4·25	85	55·99
1911 . . .	33·00	12,38,725	1,34,135	62,381	5·04	—4,827	57,554	4·64	78	53·68
1912 . . .	33·00	12,65,209	2,49,976	1,42,235	11·26	—20,464	1,21,771	9·64	145	43·10
1st qr. of 1913 .	33·00	12,72,539	36,364	7,099	0·56	+4,924	12,023	0·94	85	80·48
1913-14 . . .	33·00	13,11,472	1,58,559	46,537	3·54	+13,879	60,416	4·61	92	70·65
1914-15 . . .	33·00	13,59,590	1,65,932	60,280	4·43	—1,259	59,021	4 34	97	63·67
1915-16 . . .	33·00	13,59,656	2,31,282	1,09,188	8·03	—9,306	99,882	7·35	135	52·78
1916-17 . . .	33·00	13,59,598	1,56,949	62,192	4·57	—6,860	55,332	4·07	91	60·38
1917-18 . . .	33·00	13,83,955	1,96,825	84,388	6·09	—7,373	77,015	5·56	115	57·12

BURDWAN-KATWA RAILWAY (2' 6" gauge).

Date of registration of the Company—1913.

Construction of this line by the Burdwan-Katwa Railway Company was authorised in Railway Board's telegram No. 3711 R.C., dated the 30th December 1913.

Progress in opening—

Section of railway.	Date of opening.	Miles.	Total.
1	2	3	4
Burdwan to Katwa	1-12-15	32·52	32·52

Details of construction.—

Permanent-way.—The permanent-way consists of 35 lbs. flat-footed rails laid on sál sleepers.

Ballast.—The line is ballasted with moorum, except in station yards and on open top bridge approaches where stone or brick ballast is being used.

Fencing.—The line is not fenced.

Curves.—The sharpest curve in station yards has a radius of 573 feet.

Gradients.—The ruling gradient is 1 in 200.

Contract—

Dated the 5th April 1917, *between the Secretary of State and the Burdwan-Katwa Railway Company Limited,* as to the construction, maintenance and working of the line.

Main provisions of contract—

(i) *Land.*—Provided by Government free of cost to the Company.

(ii) *Government aid.*—

(iii) *Distribution of profits.*—

When the net receipts shall not be sufficient to pay interest at the rate of 3½ per cent per annum on the paid-up share capital, the Secretary of State shall pay the Company a sum which together with the net receipts will make up an amount equal to 3½ per cent. When the net receipts for any year do not exceed 5 per cent per annum on the paid up share capital the whole of such net receipts shall belong to the Company. When the net receipts in any year exceed 5 per cent on the paid-up share capital such excess shall be divided equally between the Secretary of State and the Company.

(iv) *Rates and fares.*—Rates and fares shall be such as may from time to time be sanctioned by the Secretary of State and the classification of goods shall be in conformity with that from time to time in force on State Railways of a similar gauge.

(v) *Special obligations as to the conveyance of mails, troops, police, etc.*—To be conveyed in the same manner and subject to the same regulations and conditions as are in force on State Railways of similar gauge.

(vi) *Power of Government to determine contract.*—The Secretary of State may at any time, by giving six months' notice, assume the working of the railway by State or any other agency, if the Company are guilty of any breach of contract, or gross mismanagement, or if the working expenses have exceeded the gross earnings for six consecutive half years.

BURDWAN-KATWA RAILWAY (2′ 6″ gauge)—*concld.*

Main provisions of contract—

The Secretary of State may, by giving 12 months' previous "Notice of purchase" determine the contract either on the 31st March 1946 or on the 31st March in the last year of any subsequent period of ten years, paying to the Company a sum of money equal to 25 times the amount of the average of the yearly net earnings during the 3 years immediately preceding, but the amount so payable shall not exceed by more than 20 per cent the total capital expenditure or be less than such capital expenditure.

The Secretary of State may also by giving 12 months' previous "Notice of special purchase" determine the contract at any time in the following cases :—

(*a*) When it is considered desirable that the gauge of the Railway should be altered.

(*b*) When it is desired to convert the Railway into a line of through communication.

(*c*) When it is desired to extend the Railway and the Company does not, within six months from date of formal requisition, raise such additional capital.

If the Contract is determined by "Notice of special purchase" the Secretary of State shall pay the Company 25 times the average of yearly net earnings during the 3 years immediately preceding or 115 per cent of the total capital expenditure whichever may be greater.

(vii) *Power of the Company to surrender contract.*—Nil.

(viii) *Term of contract.*—Shall remain in force until determined under (vi) above.

Statistics of working—

Year.	Mileage open at end of each year.	Total capital outlay including suspense, to end of each year, i.e., outlay on (*i*) lines open and (*ii*) lines partly or wholly under construction.	Gross earnings.	Net earnings.	Percentage of net earnings on total capital outlay given in column (3).	Guaranteed interest recoverable from Government.	Total income.	Percentage of total income on total capital outlay given in column (3).	Earnings per mile per week	Proportion of expenses to earnings.
1	2	3	4	5	6	7	8	9	10	11
	Miles.	Rs.	Rs.	Rs.					Rs.	
1915-16 .	32·52	17,26,605	38,464	18,025	1·08	...	...	...	23	51·57
1916-17 .	32·52	17,81,915	1,33,399	8,570	0 48	54,229	62,799	3,52	78	93·57
1917-18 .	32 52	17,98,301	1,22,146	32,104	1·79	62,300	94,404	5,25	78	75·78

CHAMPANER-SHIVRAJPUR-PANI LIGHT RAILWAY (2′ 6″ gauge).

Date of registration of the Company.—30th March 1911.

This line was constructed by the Shivrajpur Syndicate, Limited, of Bombay, under the Indian Tramways Act, 1886 (XI of 1886). It was transferred to the Guzerat Railways Company, Limited, with effect from the 1st April 1915 and the Indian Railways Act, 1890 (IX of 1890), applied to it from the 23rd March 1916, when the tramway order, under which the line was constructed, was revoked.

Progress in opening—

Sections of railway.	Date of opening.	Miles.	Total.	Grand total.
1	2	3	4	5
Main line—				
Champaner Road Junction to Shivrajpur	24-1-11	17·11		
Shivrajpur to Ghanta	2-4-15	59·4		
Ghanta to Nathpura	25-5-16	3·11		
Nathpura to Pani	15-11-16	4·47		
			30·63	
Branch—				
Shivrajpur to Shivrajpur Mines	24-1-11	1·77		
			1·77	
GRAND TOTAL	...	...	...	32·40

Details of construction—

Permanent-way.—The permanent-way consists of 29½-lb. steel rails on wooden sleepers.

Ballast.—The line is ballasted with heavy stone ballast.

Fencing.—The line is unfenced except at station yards.

Curves.—The sharpest curve is of 716 feet radius.

Gradients.—The ruling gradient is 1 in 100.

Agreements—

Dated the 1st April 1915, *between the Guzerat Railways Company, Limited, and the Shivrajpur Syndicate Limited, of Bombay,* as to the transfer of the Champaner-Shivrajpur Tramway, and its extension to Pani, to the Guzerat Railways Company, Limited, and its inclusion, as from the 1st April 1915, in the Guzerat Railways' system.

The agreement, *between the Secretary of State and the Guzerat Railways Company,* as to the terms of working, which will be much on the same lines as those for the Godhra-Lunavada Railway, is under preparation.

Statistics of working—

Year.	Mileage open at end of each year.	Total capital outlay, including suspense, to end of each year, i.e., outlay on (i) lines open and (ii) lines partly or wholly under construction.	Gross earnings.	Net earnings.	Percentage of net earnings on total capital outlay given in column (3).	Rebate from, (+), or share of surplus profits to, (—), the Government of India.	Total income.	Percentage of total income on total capital outlay given in column 3.	Earnings per mile per week.	Proportion of expenses to earnings.
1	2	3	4	5	6	7	8	9	10	11
	Miles.	Rs.	Rs.	Rs.		Rs.	Rs.		Rs.	
1911 .	20·24	3,02,929	64,961	15,545	1·72	...	15,545	1·72	61	75·74
1912 .	20·24	9,26,707	87,721	31,705	3·42	...	31,705	3·42	83	63·86
1st qr. of 1913.	20·24	9,27,947	32,759	18,153	1·95	...	18,153	1·95	124	44·59
1913-14 .	20·24	9,38,606	86,769	25,223	2·68	...	25,223	2·68	82	70·93
1914-15 .	20·24	14,08,254	64,064	174	0·01	...	174	0·01	61	99·73
1915-16 .	24·95	15,27,336	74,279	17,242	1·12	+30,433	47,675	3·12	58	76·78
1916-17 .	32·40	16,37,579	95,325	27,919	1·71	+19,867	47,786	2·92	56	70·71
1917-18 .	32·40	16,25,532	1,25,762	39,366	2·42	+40,446	79,812	4·91	74	68·70

CUTCH STATE RAILWAY (2' 6" gauge).

This line was sanctioned for construction at the cost of His Highness the Maharaja Maha Rao Sahib of Cutch, under the Government of India, Public Works Department, Notification No. 329, dated the 4th September 1903, and the Railway Board Notification No. 86, dated the 1st June 1905 and is maintained and worked by the Cutch Durbar.

Progress in opening—

Sections of railway.	Date of opening.	Miles.	Total.	Grand total.
1	2	3	4	5
Tuna to Anjar	18-5-05	11·67		
Anjar to Bhuj	1-11-08	25·11		
TOTAL OPEN MILEAGE	...	...	36·78	
UNDER CONSTRUCTION OR SANCTIONED FOR CONSTRUCTION— Anjar to Bachau (sanctioned on 20th November 1913)	...	23·75	23·75	
GRAND TOTAL	...	...	...	60·53

Details of construction—

Permanent-way.—The permanent-way consists of 30-lb. flat-footed steel rails on half-round teak sleepers.

Ballast.—The line is ballasted with stone.

Fencing.—The line is unfenced.

Curves.—The sharpest curve is of 359 feet radius.

Gradients.—The ruling gradient is 1 in 200 between Tuna and Anjar and 1 in 100 between Anjar and Bhuj.

Contract—

Nil.—The line is owned and worked by the Cutch Durbar.

Statistics of working (Those for the periods prior to 1908 will be found in Appendix 38 to the Railway Administration Report for 1907.)—

Year.	Mileage open at end of each year.	Total capital outlay, including suspense, to end of each year, i.e., outlay on (i) lines open and (ii) lines partly or wholly under construction.	Gross earnings.	Net earnings.	Percentage of net earnings on total capital outlay given in column (3).	Earnings per mile per week.	Proportion of expenses to earnings.
1	2	3	4	5	6	7	8
	Miles.	Rs.	Rs.	Rs.		Rs.	
1908	36·78	8,74,980	40,006	18,237	2·07	20	54·41
1909	36·78	9,42,842	84,864	47,851	5·07	44	43·61
1910	36·78	9,42,842	93,639	55,953	5·93	49	40·24
1911	36·78	9,48,711	1,01,087	58,576	6·17	53	42·05
1912	36·78	16,08,738	1,01,780	56,665	5·61	53	44·67
1st qr. of 1913	36·78	10,51,183	23,033	12,650	1·20	52	45·07
1913-14	36·78	10,52,405	97,786	33,455	3·17	51	65·78
1914-15	36·78	10,78,861	96,976	39,954	3·62	51	59·72
1915-16	36·78	10,92,726	1,05,271	52,745	4·82	55	49·89
1916-17	36·78	11,31,409	92,988	35,526	3·14	49	61·79
1917-18	36·78	11,48,615	58,800	2,471	0·22	31	82·89

DEHRI-ROHTAS LIGHT RAILWAY (2′ 6″ gauge).

Date of registration of the Company—17th March 1909.

Progress in opening—

Section of railway	Date of opening.	Miles.	Total.
1	2	3	4
Dehri-on-Sone to Rohtas	6-2-11	23·83	23·83

Details of construction—

Permanent-way.—The permanent-way consists of 30-lb. steel rails on sâl sleepers.

Ballast.—The whole line is ballasted.

Fencing.—The line is unfenced.

Curves.—The sharpest curve is of 477 feet radius.

Gradients.—The ruling gradient is 1 in 200, uncompensated.

Agreement and Local Government order—

Agreement, dated the 13th October 1907, *between the District Board of Shahabad and Messrs. Octavius Steel and Company of Calcutta (called "the Promoters") for and on behalf of the Dehri-Rohtas Tramway Company, scheduled to the order quoted below;*

The Dehri-Rohtas Tramway Company order published under the Bengal Government, Railway Department. Notification No. 24 R., dated the 10th November 1908;

} As to the construction, maintenance and working of the line, from Dehri-on-Sone to Rohtas.

Main provisions of agreement and Local Government order—

(i) *Land.*—The line runs partly on Government land in charge of the Public Works Department and partly along the district road to Akbarpur. The District Board of Shahabad have granted to the Dehri-Rohtas Tramway Company in perpetuity, subject to their right of purchasing the line [as in (vi) below], the free use of so much of the side of the District Board road between Dehri and Rohtas as is necessary, but not exceeding a width of eight feet leaving a clear roadway of fourteen feet intact for ordinary wheeled traffic, for the purpose of the line, and have promoted the acquisition of any additional land required outside the boundary of the said road at the cost of the Company.

(ii) *Aid by the Local Authority.*—The District Board of Shahabad will recommend and apply to the Local Government to exempt the Dehri-Rohtas Tramway Company from the tax on account of road cess, or to exact only a nominal tax, for a period of twenty-one years from the date when the line is opened for traffic, with power of renewal.

(iii) *Distribution of profits.*—The profits go to the Company.

(iv) *Rates and fares.*—Certain maximum rates of fares for passengers and tariff of charges for goods and the East Indian railway classification of goods, have been fixed. Full control over charges of all kinds is reserved to the Local Government.

(v) *Special obligations as to the conveyance of.*—

(*a*) Mails, troops, police, high Government officials and Government stores.—
(*b*) Government bullion and coin, and the persons in charge thereof.—
} Nil.

(vi) *Power of the Local Authority to determine agreement.*—Upon the expiration of 21 years, from the date of the Local Government order authorising the construction of the line, or at the end of every seven years thereafter, the District Board of Shahabad have, by giving six months' previous notice, the right of purchasing the line by paying to the Company the value calculated at twenty years' purchase of the average net annual profits of the Company during the four years preceding the transaction together with a bonus of 20 per cent thereon.

(vii) *Power of the Company to surrender agreement.*—Nil.

(viii) *Term of agreement* [*if not determined under* (vi)].—None specified.

Statistics of working—

Year.	Mileage open at end of each year.	Total capital outlay including suspense, to end of each year, *i.e.*, outlay on (*i*) lines open and (*ii*) lines partly or wholly under construction.	Gross earnings.	Net earnings.	Percentage of net earnings on total capital outlay given in column (3).	Earnings per mile per week.	Proportion of expenses to earnings.
1	2	3	4	5	6	7	8
	Miles.	Rs.	Rs.	Rs.		Rs.	
1911 . . .	23·83	5,32,474	24,066	—12,291	...	21	151·07
1912 . . .	23·83	5,51,080	79,436	34,810	6·31	64	56·17
1st qr. of 1913 .	23·83	5,81,830	30,602	17,380	2·82	99	43·20
1913-14 . .	23·83	6,15,474	1,43,861	93,912	15·25	120	37·33
1914-15 . .	23·83	6,26,528	1,90,728	1,30,900	20·89	152	31·35
1915-16 . .	23·83	6,27,568	2,19,432	1,48,953	23·73	176	32·11
1916-17 . .	23·83	6,88,158	2,31,709	1,58,246	23·00	187	31·70
1917-18 . .	23·83	6,70,323	2,18,395	1,39,039	20·74	176	36·26

DHOLPUR-BARI RAILWAY SYSTEM.

Lines comprised in the system—The Dholpur-Bari railway system is made up of—

	Miles.
(*a*) Dholpur-Bari railway (2′ 6″ gauge)	36·38
(*b*) Mohari-Barauli railway (2′ 6″ gauge)	15·25
Total ...	51·63

Dholpur-Bari railway (2′ 6″ gauge).—

This railway was sanctioned for construction at the cost of His Highness the Rana of Dholpur, under Railway Board's Notification No. 267, dated the 14th December 1905, and is maintained and worked by the Dholpur Durbar.

Progress in opening—

Sections of railway.	Date of opening.	Miles.	Total.
1	2	3	4
Dholpur on the Midland section of the Great Indian Peninsula railway to Bari . .	24-2-08	19·62	
Bari to Baseri	15-9-13	8·81	
Baseri to Tantpur	1-7-14	7·95	
TOTAL .	...	...	36·38

Details of construction—

Permanent-way.—Five miles are laid with 35-lb. old steel rails on Indian State railway pattern steel trough sleepers; the remainder with 30-lb. new steel rails on Indian State railway pattern steel sleepers.

Ballast.—The line is ballasted throughout with stone.

Fencing.—The line is not fenced.

Curves.—The radius of the sharpest curve is 1,432 feet.

Gradients.—The ruling gradient is 1 in 200.

Contract—

Nil.—The line is owned and worked by the Dholpur Durbar.

Statistics of working—(Includes the Mohari-Barauli railway from 1916-17).

Year.	Mileage open at end of each year.	Total capital outlay, including suspense, to end of each year, *i.e.*, outlay on (*i*) lines open and (*ii*) lines partly or wholly under construction.	Gross earnings.	Net earnings.	Percentage of net earnings on total capital outlay given in column (3).	Earnings per mile per week.	Proportion of expenses to earnings.
1	2	3	4	5	6	7	8
	Miles.	Rs.	Rs.	Rs.		Rs.	
1908 . .	19·62	7,33,502	21,352	—11,261	...	25	152·74
1909 . .	19·62	6,91,940	36,226	5,773	0·83	35	84·06
1910 . .	19·62	6,96,601	48,377	19,835	2·85	47	58·99
1911 . .	19·62	7,41,111	41,566	14,338	1·93	41	65·50
1912 . .	19·62	8,24,492	40,264	7,945	0·96	39	80·27
1st qr. of 1913	19·62	8,54,148	13,682	5,468	0·64	53	60·04
1913-14	28·43	10,73,930	54,372	21,722	2·02	36	60·04
1914-15	36·38	12,40,836	71,705	28,006	2·26	38	60·94
1915-16	36·38	12,42,223	87,624	30,240	2·44	46	65·48
1916-17	51·63	*12,41,848	1,06,000	53,767	4·33	40	49·28
1917-18 . .	51·63	*12,32,602	1,11,334	43,911	3·39	42	60·56

* Excludes the expenditure incurred by the Imperial Delhi Committee on the Mohari-Barauli section prior to its opening.

Mohari-Barauli railway (2′ 6″ gauge).—

This line was constructed by the Imperial Delhi Committee for the carriage of stone for New Delhi from Mohari to Barauli. In accordance with Foreign and Political Department Memorandum No. 172-I.B., dated the 14th February 1917, the line was taken over by the Dholpur Durbar from the Committee on the 10th February 1917 for the carriage of passenger and goods, under the Indian Railways Act, 1890 (IX of 1890).

Progress in opening—

Section of railway.	Date of opening.	Miles.	Total.
1	2	3	4
Mohari to Barauli	10-2-17	15·25	15·25

DHOLPUR-BARI RAILWAY SYSTEM—*concld.*

Mohari-Barauli railway (2′ 6″ gauge)—*concld.*

Details of construction—

Permanent-way.—The line is laid with 42-lb. second-hand flat-footed steel rails on sâl sleepers.

Ballast.—The line is ballasted with stone.

Fencing.—The line is unfenced.

Curves.—The sharpest curve has a radius of 1,146 feet.

Gradients.—The ruling gradient is 1 in 200.

Agreement—

Dated the 14th April 1915, *between the Dholpur Darbar and the Imperial Delhi Committee*, as to the construction and working of the line.

Main provisions of agreement—

(*i*) *Land.*—All waste land has been given free by the Durbar. In the case of cultivated land the Committee pay compensation for the use of the land and for any permanent deterioration due to the construction of the line.

(*ii*) *Government aid.*—The line is the property of the Imperial Delhi Committee, and is managed, maintained and worked by the Dholpur Durbar.

(*iii*) *Terms of working.*—The Durbar undertake to carry the stone quarried for New Delhi to Dholpur at a special rate and in order to enable them to maintain a fixed rate of delivery the Committee agree to supply the Durbar with 2 engines and 40 wagons.

The Durbar have the right to work passenger and goods traffic free of charge on the line provided the transport of stone is not interfered with.

(*iv*) *Distribution of profits.*—The whole of the profits to go to the Durbar.

(*v*) *Rates and fares.*—The same as are in force over the Dholpur-Bari railway.

(*vi*) *Special obligations as to the conveyance of.*—

(*a*) Mails, troops, police, high Government officials and Government stores—
(*b*) Government bullion and coin, and the persons in charge thereof— } *Nil.*

(*vii*) *Power of the Imperial Delhi Committee to determine agreement.*—
(*viii*) *Power of the Dholpur Durbar to surrender agreement.*— } The agreement is to terminate when all the stone required for the Government buildings in New Delhi has been obtained. On the termination of the agreement the committee are to make their own arrangements for the disposal of the rails and rolling-stock, unless the Durbar are prepared to take them over.

(*ix*) *Term of agreement* [*if not determined under* (*vii*) *and* (*viii*)].—Nil.

Statistics of working—

Included under Dholpur-Bari railway.

FUTWAH-ISLAMPUR LIGHT RAILWAY (2′ 6″ gauge).

Date of registration of the Company.—September 1915.

The construction of this line by the Futwah-Islampur Light Railway Company was authorised in Railway Board's telegram No. $\frac{2071\text{-C.}}{3216}$, dated the 24th September 1915.

Progress in opening—

Section of railway.	Date of opening.	Miles.	Total.
1	2	3	4
Futwah to Islampur (sanctioned on 24th September 1915)	...	27·00	27·00

GODHRA-LUNAVADA RAILWAY (2′ 6″ gauge).

Date of registration of the Company.—30th March 1911.

The construction of this line by the Guzerat Railways Company was sanctioned by the Railway Board in their letter No. 731 R.C., dated the 13th March 1912.

Progress in opening—

Sections of railway.	Date of opening.	Miles.	Total.
1	2	3	4
Godhra to Lunavada Road	4-12-13	24·00	
Lunavada Road to Lunavada	1-9-14	1·45	
TOTAL . .	...	...	25·45

Details of construction—

Permanent-way.—The permanent-way consists of 30-lb. flat-footed rails on steel trough sleepers, I. S. R. pattern.

Ballast.—The line is laid on coarse and hard sand ballast, covered with quartz ballast.

Fencing.—Only certain station yards have been fenced.

Curves.—The sharpest curve has a radius of 600 feet.

Gradients.—The ruling gradient is 1 in 100.

Contract—

Dated the 30th April 1914, between the Secretary of State and the Guzerat Railways Company, as to the construction, maintenance, management and working of the line by the Guzerat Railways Company.

Main provisions of contract—

(i) *Land.*—Land in British territory provided by the Government free of cost to the Company including land permanently or temporarily required for quarrying, ballast, brickfields and kindred purposes.

(ii) *Government aid.*—The Government allow to the Railway Company in respect of each year by way of rebate, a sum not exceeding the net earnings from all traffic, except the earnings derived from the carriage of stores, interchanged between the Bombay, Baroda and Central India railway and this railway, as shall, together with the net earnings of the Company in respect of this railway, make up an amount equal to interest for the year at the rate of 5 per cent per annum on the paid up share capital of the Company.

(iii) *Distribution of profits.*—When the net earnings of the Company in any year exceed the minimum amount sufficient to give a return of 5 per cent per annum on the paid up share capital of the Company such excess is to be divided equally between the Government and the Company.

(iv) *Rates and fares.*—Such as may from time to time be agreed upon between the Government and the Company and the classification of goods to be in conformity with that from time to time in force on State railways of the same gauge.

(v) *Special obligations as to the conveyance of—*

(*a*) Mails, troops, police, high Government officials and Government stores.—
(*b*) Government bullion and coin, and the persons in charge thereof.—

} To be conveyed at the same rates and under the same arrangements as apply to State railways on the same gauge.

(vi) *Power of the Government to determine agreement.*—The Government may, by giving twelve months' "notice of purchase," determine the contract on the 31st March 1944 or on the 31st March in the last year of any subsequent period of ten years.

GODHRA-LUNAVADA RAILWAY (2' 6" gauge)—*concld.*

Main provisions of contract—*concld.*

If the contract is determined by "notice of purchase" the Government shall pay to the Company 25 times the amount of the average net earnings (excluding payments on account of rebate) derived by the Company during the three years immediately preceding the time at which the contract shall be determined, subject to a limit of 20 per cent. in excess of, but not less than, the total capital expenditure of the Company.

The Government may also, by giving twelve months' "notice of special purchase," determine the contract at any time in the following cases:—

(*a*) when it is considered desirable that the gauge of the railway should be altered;

(*b*) when it is considered desirable to convert the railway into a line of through communication and

(*c*) when it is considered desirable to extend the railway (without altering the gauge or making the line part of a through route), and the Company is unable or unwilling to supply the necessary capital for such extension.

If the contract be determined by "notice of special purchase," the Government to pay to the Company 25 times the average net earnings (excluding payment on account of rebate) of the Company during the last preceding three years or 115 per cent. of the total capital expenditure of the Company, whichever may be the greater.

(vii) *Power of the Company to surrender contract.*—Nil.

(viii) *Term of contract [if not determined under* (vi).]—None specified.

Statistics of working—

Year.	Mileage open at end of each year.	Total capital outlay, including suspense to end of each year, i.e., outlay on (*i*) lines open and (*ii*) lines partly or wholly under construction.	Gross earnings.	Net earnings.	Percentage of net earnings on total capital outlay given in column (3).	Rebate from, (+), or share of surplus profits payable to, (—), the Government of India.	Total income.	Percentage of total income on total capital outlay given in column (3).	Earnings per mile per week.	Proportion of expenses to earnings.
1	2	3	4	5	6	7	8	9	10	11
		Rs.	Rs.	Rs.			Rs.		Rs.	
1913-14 .	24·00	11,39,708	13,289	1,860	0·16	...	1,860	0·16	32	86·99
1914-15 .	25·45	13,02,936	45,407	4,528	0·34	+38,069	42,597	3·27	34	90·03
1915-16 .	25·45	12,90,052	52,342	—3,559	...	+66,906	63,347	4·91	39	106·80
1916-17 .	25·45	12,91,989	64,314	10,280	0·77	+53,019	63,299	4·90	49	84·02
1917-18	25·45	12,97,473	54,500	—3,537	...	+67,241	63,704	...	41	106·49

JESSORE-JHENIDAH RAILWAY (2′ 6″ gauge).

Date of registration of the Company.—28th March 1911.

The sanction accorded by the Government of Bengal to the construction of this line under the Indian Railways Act, IX of 1890, was approved by the Government of India in their letter No. 275 R.P., dated the 2nd December 1910.

Progress in opening—

Sections of railway.	Date of opening.	Miles.	Total.
1	2	3	4
Main line—			
Jessore to Jhenidah	1-10-13	29·00	
Branch—			
Kaliganj to Kot Chandpur	1-10-13	7·75	
TOTAL . .	...	...	36·75

Details of construction—

Permanent-way.—The permanent-way consists of 30-lb. flat-footed steel rails laid chiefly on sâl sleepers.

Ballast.—The line is ballasted almost throughout with brick.

Fencing.—The line is unfenced.

Curves.—The sharpest curve is of 382 feet radius.

Gradients.—The ruling gradient is 1 in 150.

Contract and agreement—

Contract, dated the 26th May 1913, *between the Secretary of State and the Jessore-Jhenidah Railway Company*, as to the construction, maintenance and working of the line.

Agreement, dated the 26th May 1913, *between the District Board of Jessore and the Jessore-Jhenidah Railway Company*, as to the grant of certain concessions to the latter by the former under certain conditions.

Main provisions of contract and agreement—

(i) *Land.*—Land on one side of the District Board road not exceeding 8 feet in width granted free, any additional land being acquired by Government at the cost of the Company.

(ii) *Aid by the District Board.*—The District Board of Jessore guarantee to supplement the net earnings of the Company by such annual subsidy as may be necessary to make up a dividend of 4 per cent per annum on the Company's paid up share capital, provided that the total sum so payable by the Board shall not in any one year exceed the sum of Rs. 32,000. The Board will recommend and apply to the Local Government for the exemption of the Company from road cess, or for the levy of only a nominal tax for a period of 21 years from the date of opening of the line for traffic.

(iii) *Distribution of profits.*—Surplus profits of the Company in excess of 4 per cent on their paid up share capital are divisible between the Company and the District Board in equal shares.

(iv) *Rates and fares.*—Rates and fares shall be such as may from time to time be arranged by the Secretary of State and the classification of goods shall be in conformity with that in force on State railways of the same gauge.

(v) *Special obligations as to the conveyance of—*

(*a*) Mails, troops, police, high Government officials and Government stores.—
(*b*) Government bullion and coin, and the persons in charge thereof.—
} To be conveyed in the same manner and subject to the same regulations and conditions as are in force on State railways of the same gauge.

JESSORE-JHENIDAH RAILWAY (2′ 6″ gauge)—*concld.*

Main provisions of contract and agreement—*concld.*

(vi) *Power of the Government to determine contract.*—The Government may, by giving 12 months' previous 'notice of purchase', determine the contract either on the 31st March 1943, or on the 31st December in the last year of any subsequent period of 10 years, paying to the Company 25 times the amount of the average yearly net earnings during the 3 years immediately preceding, provided that the amount payable to the Company shall not in any case exceed by more than 20 per cent, or be less than, the total capital expenditure of the Company.

The Government may also, by giving 'notice of special purchase', determine the contract at any time in the following cases :—

(*a*) when it is considered desirable to alter the gauge of the railway ;

(*b*) when it is considered desirable to convert the railway into a line of through communication ; and

(*c*) when it is considered desirable to extend the railway (without altering the gauge or making the line part of a through route) and the Company is unable or unwilling to provide funds for such extension.

If the contract be determined by 'notice of special purchase' the Government will pay to the Company 25 times the average yearly net earnings during the 3 years preceding the purchase, or 115 per cent of the total capital expenditure, whichever may be the greater.

(vii) *Power of the Company to surrender contract.*—Nil.

(viii) *Term of Contract* [*if not determined under* (vi)].—Not specified.

Statistics of working—

Year.	Milcage open at end of each year.	Total capital outlay, including suspense, to end of each year, *i.e.*, outlay on (*i*) lines open, and (*ii*) lines partly or wholly under construction.	Gross earnings.	Net earnings.	Percentage of net earnings on total capital outlay given in column (3).	Subsidy from, (+), or share of net profits to, (−), the District Board.	Total income [column 5 + or − column 7]	Percentage of total income on total capital outlay given in column (3).	Earnings per mile per week.	Proportion of expense s to earnings.
1	2	3	4	5	6	7	8	9	10	11
	Miles.	Rs.	Rs.	Rs.		Rs.	Rs.		Rs.	
1913-14 .	36·80	12,33,610	49,667	12,145	0·98	...	12,145	0·98	52	75·55
1914-15 .	36·80	12,49,383	77,308	−16,468	...	*	...	...	40	121·25
1915-16 .	36·80	12,80,742	94,740	−38,767	...	*	...	...	49	140·92
1916-17 .	36·80	13,49,378	1,10,698	−32,470	...	*	...	...	58	129·34
1917-18 .	36·75	13,96,544	88,775	−55,760	...	*	...	...	46	162·81

*The question of subsidy is under dispute.

KALIGHAT-FALTA RAILWAY (2′ 6″ gauge).

Date of registration of the Company.—April 1915.

The construction of this line by the Kalighat-Falta Railway Company was authorised in Railway Board's telegram No. $\frac{84\text{-P.}}{1349}$, dated the 26th April 1915.

Progress in opening—

Section of railway.	Date of opening.	Miles.	Total.
1	2	3	4
Gholeshapur (near Kalighat) to Falta	28-5-17	25·33	25·33

Details of construction—

Permanent-way.—The permanent-way consists of 35-lb. flat-footed rails on sâl sleepers.

Ballast.—Brick ballast has been largely used but on the independent banks cinder ballast has been provisionally laid down.

Fencing.—The line is unfenced.

Curves.—The sharpest curve is of 573 feet radius.

Gradients.—The ruling gradient is 1 in 200.

Contract—

The line was constructed and is being worked under the terms of a contract between the Secretary of State and the Kalighat-Falta Railway Company which is under consideration.

Statistics of working—

Year.	Mileage open at end of the year.	Total capital outlay, including suspense, to end of the year, *i.e.*, outlay on (*i*) lines open and (*ii*) lines partly or wholly under construction.	Gross earnings.	Net earnings.	Percentage of net earnings on total capital outlay given in column (3).	Earnings per mile per week.	Proportion of expenses to earnings.
1	2	3	4	5	6	7	8
	Miles.	Rs.	Rs.	Rs.		Rs.	
1917-18 . . .	25·33	17,36,978	88,697	20,146	1·16	80	77·29

KOLAR DISTRICT RAILWAY (2′ 6″ gauge).

The first section, from Bowringpet to Kolar, formerly known as the Bowringpet-Kolar railway, was constructed by the Mysore Durbar under sanction conveyed in Government of India, Foreign Department letter No. 2161-I.B., dated the 15th October 1912. It was financed entirely by the District Board of Kolar from the proceeds of a debenture loan. Later on as the District Board were unable to raise the entire capital for the whole line, from Bowringpet to Chik Ballapur, the cost was borne in equal proportions both by the Durbar and the District Board.

Progress in opening—

Sections of railway.	Date of opening.	Miles.	Total.
1	2	3	4
Bowringpet to Kolar	15-12-13	10·65	
Kolar to Chintamani	6-8·16	29·59	
Chintamani to Chik Ballapur	8-11-16	23·27	
TOTAL	...	...	63·51

Details of construction—

Permanent-way.—The permanent-way consists of 41¼-lb. second-hand rails for 41 miles, and 41¼-lb. new rails, from the Tata Iron and Steel Company, for the remainder. The rails are laid on steel sleepers for 37 miles, and on wooden sleepers for 27 miles. The wooden sleepers are mostly teak, a small percentage being jalare and jambe.

Ballast.—The line between Bowringpet and Kolar is ballasted with sand and between Kolar and Chintamani boxed with good gravely soil. Between Chintamani and Chik Ballapur the ballast consists of moorum, except at bridge approaches where broken stone is used.

Fencing.—The line is unfenced.

Curves.—The sharpest curve is of 716 feet radius.

Gradients.—The ruling gradient is 1 in 100.

Agreement—

The line is maintained, managed and worked by the Mysore Durbar under the terms of an agreement between them and the District Board of Kolar which is under consideration.

Statistics of working—

Year.	Mileage open at end of each year.	Total capital outlay, including suspense, to end of each year, i.e., outlay on (i) lines open and (ii) lines partly or wholly under construction.	Gross earnings.	Net earnings.	Percentage of net earnings on total capital outlay given in column (3).	Earnings per mile per week.	Proportion of expenses to earnings.
1	2	3	4	5	6	7	8
	Miles.	Rs.	Rs.	Rs.		Rs.	
1913-14	10·92	2,95,577	7,598	—253	...	43	103·33
1914-15	10·92	6,42,569	36,093	4,815	0·75	64	86·66
1915-16	40·71	14,06,864	47,918	12,303	0·87	23	74·32
1916-17	63·51	17,09,216	1,05,093	14,942	0·88	32	85·78
1917-18	63·51	18,74,516	1,56,758	31,722	1·69	47	79·76

MADAYA LIGHT RAILWAY (2′ 6″ gauge).

Date of registration of the Company.—28th August 1906.

Progress in opening—

Sections of railway.	Date of opening.	Miles.	Total.
1	2	3	4
Zegyo quarter of Mandalay town to Obo	10-2-12	3·40	
Obo to Toungbyon	25-7-12	4·90	
Toungbyon to Madaya	22-5-17	7·70	
TOTAL OPEN MILEAGE	...	...	16·00

Details of construction—

Permanent-way.—The permanent-way consists of 19-lb. and 24-lb. flat-footed steel rails laid on several varieties of local wood with some old stamped steel sleepers.

Ballast.—In most places throughout the line the ballast consists of brick rubbish.

Fencing.—The line is unfenced.

Curves.—The sharpest curve is of 286 feet radius.

Gradients.—The ruling gradient of the greater part of the railway is 1 in 1,000, except on the Zegyo-Obo section where it is 1 in 333 with a 1 in 100 banking section.

Local Government order—

Madaya Tramway order published under the Burma Government, Municipal and Local Department, Notification No. 22, dated the 13th February 1906, authorising the construction, maintenance and use of a system of tramways from Madaya in the district of Mandalay to the Obo quarter of Mandalay town.

Main provisions of Local Government order—

(i) *Land.*—Land acquired at an annual track rent of Rs. 250 per mile for the first three years, and Rs. 400 per mile thereafter, provided that no turnout or siding is liable to rent.

(ii) *Government aid.*—Nil.

(iii) *Distribution of profits.*—The whole of the profits belong to the Promoters.

(iv) *Rates and fares.*—The minimum rate of fares for passengers has been fixed at half anna per mile. The charges for goods and for passengers' luggage to be fixed between the Promoters and the Local Government.

(v) *Special obligations as to the conveyance of—*

(*a*) Mails, troops, police, high Government Officials and Government stores.—
(*b*) Government bullion and coin, and the persons in charge thereof.— } *Nil.*

(vi) *Power of the Government to determine contract.*—After the expiration of 42 years from the date of the order and within six months after the expiration of every subsequent period of ten years, the Deputy Commissioner, Mandalay district, with the previous sanction of the Local Government, may require the Promoters to sell to him the undertaking at a fair market value of all lands, etc., used for the purposes of the line.

(vii) *Power of the Promoters to surrender contract.*—Nil.

(viii) *Term of contract* [*if not determined under* (vi)].—None specified.

Statistics of working—

Year.	Mileage open at end of each year.	Total capital outlay, including suspense, to end of each year, i.e., outlay on (*i*) lines open and (*ii*) lines partly or wholly under construction.	Gross earnings.	Net earnings.	Percentage of net earnings on total capital outlay given in column (3).	Earnings per mile per week.	Proportion of expenses to earnings.
1	2	3	4	5	6	7	8
	Miles.	Rs.	Rs.	Rs.		Rs.	
1912	8·30						
1st qr. of 1913	8·30						
1913-14	8·30	Information	not available.				
1914-15	8·30						
1915-16	8·30						
1916-17	8·30						
1917-18	16·00						

NADIAD-KAPADVANJ RAILWAY (2′ 6″ gauge).

Date of registration of the Company.—30th March 1911.

The construction of this line by the Guzerat Railways Company was sanctioned by the Railway Board in their letter No. 546-R.C., dated the 28th February 1911.

Progress in opening—

Section of railway.	Date of opening.	Miles.	Total.
1	2	3	4
A point near Nadiad station to Kapadvanj	5-3-13	28·01	28·01

Details of construction—

Permanent-way.—The permanent-way consists of 30-lb. flat-footed rails laid on steel trough sleepers, Indian State Railway pattern.

Ballast.—The line is ballasted throughout with heavy laterite.

Fencing.—The line is unfenced, except in station yards.

Curves.—The sharpest curve is of 716 feet radius.

Gradients.—The ruling gradient is 1 in 100.

Agreement—

Dated the 30th April 1914, between the Secretary of State and the Guzerat Railways Company, as to the construction, maintenance, management and working of the line by the Guzerat Railways Company.

Main provisions of agreement—

As noted under Godhra-Lunavada railway (2′ 6″ gauge).

Statistics of working—

Year.	Mileage open at end of each year.	Total capital outlay, including suspense, to end of each year, i.e., outlay on (i) lines open and (ii) lines partly or wholly under construction.	Gross earnings.	Net earnings.	Percentage of net earnings on total capital outlay given in column (3).	Rebate from, (+), or share of surplus profits to, (—), the Government of India.	Total income.	Percentage of total income on total capital outlay given in column (3).	Earnings per mile per week.	Proportion of expenses to earnings.
1	2	3	4	5	6	7	8	9	10	11
	Miles.	Rs.	Rs.	Rs.		Rs.	Rs.		Rs.	
1st qr. of 1913	27·86	9,25,052	6,571	1,810	0·20	...	1,810	0·20	61	72·45
1913-14 .	27·86	12,50,471	1,02,727	41,218	3·30	...	41,218	3.30	70	59·87
1914-15 .	27·86	13,42,442	1,19,495	39,421	2·93	+4,467	43,888	3·27	82	67·01
1915-16 .	27·86	14,68,525	1,33,696	56,086	3·82	+16,026	72,112	4·91	92	58·05
1916-17 .	28·01	15,11,305	1,44,523	69,816	4·63	+4,229	74,045	4·90	99	51·69
1917-18 .	28·01	14,89,403	1,57,709	73,940	4·96	—812	73,128	4·91	103	53·11

SHAHDARA (DELHI)-SAHARANPUR LIGHT RAILWAY (2′ 6″ gauge).

Date of registration of the Company.—28th November 1905.

Progress in opening—

Sections of railway.	Date of opening.	Miles.	Total.
1	2	3	4
Shahdara to Shamli	7-5-07	92·50	
Shamli to Saharanpur	15-10-07		
TOTAL	...	...	92·50

Details of construction—

Permanent-way.—The permanent-way consists of 35-lb. flat-footed steel rails laid on sâl sleepers.

Ballast.—The line is ballasted with stone and broken brick.

Fencing.—The line is partially fenced.

Curves.—The sharpest curve is of 1,910 feet radius.

Gradients.—The ruling gradient is 1 in 1,000, with some short lengths of 1 in 333.

Local Government order and agreement—

The Shahdara-Saharanpur Tramway Company order, published under the Government of the United Provinces of Agra and Oudh, Public Works Department, Railway Branch, Notification No. 339-187-R., dated the 18th April 1904;

Agreement, dated the 11th October 1905, *between the Government of the United Provinces of Agra and Oudh and Messrs. Martin & Co. of Calcutta, (called "the Promoters") for and on behalf of the Shahdara (Delhi)-Saharanpur Light Railway Company*, published under the Government of the United Provinces of Agra and Oudh, Public Works Department, Railway Branch, Notification No. 1363-R.-187, dated the 22nd November 1905;

} as to the construction, maintenance and working of the line from Shahdara to Saharanpur.

Main provisions of Local Government order and agreement—

(i) *Land.*—
(ii) *Government aid.*— } The Local Government provide free of charge for the purposes of the railway sufficient land for a single 5′ 6″ gauge line, together with land for all conveniences and works approved under clause 8 of the agreement. In addition to this the Company are authorised to use for the purpose of the railway, but not for the purpose of any building or erection connected therewith, portions not exceeding six feet in width of the local roads passing between Shahdara and Saharanpur.

(iii) *Distribution of profits.*—Surplus profits in any year in excess of 4 per cent upon the paid up capital of the Company shall be divided equally between the Government and the Company; payments on account but subject to adjustment being made at close of first half-year.

(iv) *Rates and fares.*—Certain maximum rates of fares for passengers and maximum and minimum rates for goods in conjunction with the General classification of Goods have been fixed. Full control over charges of all kinds is reserved to the Local Government.

(v) *Special obligations as to the conveyance of.*—

(*a*) Mails, troops, police, high Government Officials and Government stores.—
(*b*) Government bullion and coin, and the persons in charge thereof.— } *Nil.*

SHAHDARA (DELHI)-SAHARANPUR LIGHT RAILWAY (2′ 6″ gauge)—*concld.*

Main provisions of Local Government order and agreement—*concld.*

(vi) *Power of the Government to determine agreement.*—Upon the expiration of 21 years after the date of opening, or 23 years from the date of the Local Government order sanctioning the construction of the line, whichever is earlier, or at the end of every seven years thereafter, the Local Government have, by giving 12 months' previous notice, the right of terminating the agreement by paying to the Company the value calculated at 25 years' purchase of the average annual profits of the Company for the preceding three years, subject to a minimum of the capital expended and a maximum of 25 per cent in excess of that sum. In the event of its being determined to construct a railway on a different gauge in place of the tramway, and if the Government and the Company fail to agree that the alteration shall be made by the Company, then and in such case, the Government have the right to acquire the tramway at any time on giving 12 months' notice in writing and paying to the Company a sum 25 per cent in excess of its capital expenditure.

(vii) *Power of the Company to surrender agreement.*—Nil.

(viii) *Term of agreement* [*if not determined under* (vi)].—None specified.

Statistics of working (Those for 1907 will be found in Appendix 38 to the Railway Administration Report for 1907.)—

Year.	Mileage open at end of each year.	Total capital outlay, including suspense, to end of each year, *i.e.*, outlay on (i) lines open and (ii) lines partly or wholly under construction.	Gross earnings.	Net earnings.	Percentage of net earnings on total capital outlay given in column (3).	Earnings per mile per week.	Proportion of expenses to earnings.
1	2	3	4	5	6	7	8
	Miles.	Rs.	Rs.	Rs.		Rs.	
1908 . . .	92·63	41,35,292	3,35,533	1,41,823	3·43	70	57·73
1909 . . .	92·63	41,56,390	4,05,856	1,96,014	4·71	84	51·70
1910 . . .	92·50	41,67,317	5,04,282	2,78,330	6·67	105	44·80
1911 . . .	92·50	42,16,557	5,32,232	3,10,746	7·37	110	41·61
1912 . . .	92·50	42,51,039	6,10,763	3,54,779	8·34	126	41·87
1st qr. of 1913 .	92·50	42,69,311	1,93,252	1,26,997	2·97	160	34·28
1913-14 . .	92·50	43,42,552	6,17,500	3,48,514	8·02	128	43·53
1914-15 . .	92·50	43,89,762	6,48,190	3,57,708	8·14	134	44·76
1915-16 .	92·50	44,16,947	5,49,809	2,80,278	6·34	114	49·03
1916-17 . .	92·50	44,11,392	6,68,824	3,92,996	8·90	139	41·23
1917-18 . .	92·50	44,63,101	7,15,494	3,70,892	8·31	148	48·17

TEZPORE-BALIPARA LIGHT RAILWAY (2′ 6″ gauge).

Date of registration of the Company.—2nd October 1893.

This line was authorised for construction under the Indian Tramways Act, 1886, by the Hon'ble the Chief Commissioner of Assam on the 1st June 1895. On the 3rd May 1898, the Indian Railways Act, IX of 1890, except section 135, was applied to the line.

A tramway, 2 miles long, was constructed at the expense of the Borjuli Tea Company connecting the Borjuli Tea Factory with Rangapara station on the Tezpore-Balipara Light railway. It was worked by the Tezpore-Balipara Light railway but from February 1908 has been closed to public traffic.

Progress in opening—

Sections of railway.	Date of opening.	Miles.	Total.
1	2	3	4
Tezpore Ghat to Bindukuri	9-8-94	8·10	
Bindukuri to Balipara	1-9-95	12·00	
TOTAL	...	...	20·10

Details of construction—

Permanent-way.—The permanent-way consists of 30-lb. flat-footed steel rails on Nahor or Gonserai sleepers.

Ballast.—The line is unballasted.

Fencing.—The line is fenced only at stations.

Curves.—In the first mile there are two curves with radii of 500 feet.

Gradients.—The ruling gradient between Tezpore and Rangapara, 16 miles, is 1 in 125 and between Rangapara and Balipara, 4 miles, 1 in 100.

Local Government order—

Tezpore-Balipara Steam Tramway Company order, published under the Notification by the Hon'ble the Chief Commissioner of Assam, No. 33, dated the 1st June 1895, as to the construction, maintenance and working of the line.

Main provisions of Local Government order—

(i) *Land.*—Provided at the cost of the Company, other than that which is not held under decennial *puttas* or where the holders have not acquired land-holder's rights, provided free of cost. Free use of one side of a provincial or local road is authorised for the purpose of laying the line only.

(ii) *Government aid.**—Supply, free of royalty, of timber for sleepers from Government forests for the first construction of the line only, and a payment by the Tezpore Local Board, of a subsidy of Rs. 5,000 per annum up to the end of March 1914.

* Letter from the Hon'ble the Chief Commissioner of Assam, No. 3720, dated the 10th November 1893.
Government of India, Public Works Department, letter No. 139 R.C., dated the 2nd February 1894.
Railway Board's letter No. 342 R.T., dated the 22nd February 1909.

(iii) *Distribution of profits.*—The whole of the profits belong to the Company.

(iv) *Rates and fares.*—Certain rates for carriage of passengers and goods have been fixed, but the full control over charges of all kinds is reserved by the Chief Commissioner.

(v) *Special obligations as to the conveyance of—*

(*a*) Mails, Postal Officers and servants on duty.—Conveyed at the rates and on the conditions in force from time to time on State railways.

(*b*) Troops, police, high Government Officials and Government stores
(*c*) Government bullion and coin, and the persons in charge thereof.— } Nil.

(vi) *Power of the Government to determine contract.*—After the line has been opened for 15 years and thereafter at terms of 7 years each, the Government, by giving 12 months' previous notice, have the right to terminate the contract and take over the line by paying to the Company the value of the property as a dividend-earning investment together with a bonus of 20 per cent over and above such value.

It has since been decided not to give notice of purchase to the Company on the 1st September 1909 and to defer purchase.
[Telegram from the Government of Eastern Bengal and Assam, No. 804-R., dated the 22nd July 1909.]

(vii) *Power of the Company to surrender contract.*—Nil.

(viii) *Term of contract [if not determined under* (vi)*].*—None specified.

Statistics of working (Those for the periods prior to 1908 will be found in Appendix 38 to the Railway Administration Report for 1907.)—

Year.	Mileage open at end of each year.	Total capital outlay, including suspense, to end of each year, *i.e.*, outlay on (*i*) lines open and (*ii*) lines partly or wholly under construction.	Gross earnings.	Net earnings.	Percentage of net earnings on total capital outlay given in column (3).	Subsidy from District Board.	Total income.	Percentage of total income on total capital outlay given in column (3).	Earnings per mile per week.	Proportion of expenses to earnings.
1	2	3	4	5	6	7	8	9	10	11
	Miles.	Rs.	Rs.	Rs.		Rs.	Rs.		Rs.	
1908	20·10	4,87,240	88,990	20,972	4·30	5,000	25,972	5·33	86	76·43
1909	20·10	4,87,240	85,964	23,618	4·84	5,000	28,618	5·87	84	72·52
1910	20·10	4,87,240	94,015	25,945	5·32	5,000	30,945	6·35	90	72·40
1911	20·10	4,87,240	1,14,875	31,892	6·54	5,000	36,892	7·57	110	72·23
1912	20·10	4,87,240	1,20,635	34,709	7·12	5,000	39,709	8·14	116	71·23
1st qr. of 1913.	20·10	4,87,240	27,379	4,035	0·83	...	4,035	0·83	129	85·26
1913-14.	20·10	4,87,240	1,34,638	40,489	8·31	5,000	45,489	9·33	105	69·93
1914-15.	20·10	4,87,240	1,35,559	36,620	7·51	...	36,620	7·51	136	72·98
1915-16.	20·10	4,87,240	1,41,801	44,461	9·12	...	44,461	9·12	139	68·64
1916-17.	20·10	4,87,240	1,47,201	46,561	9·55	...	46,561	9·55	141	68·37
1917-18	20·10	4,87,240	1,33,069	30,043	6·16	...	30,043	6·16	128	77·42

DARJEELING-HIMALAYAN RAILWAY SYSTEM.

Lines comprised in the system—The Darjeeling Himalayan railway system is made up of—

	Miles.
(*a*) Darjeeling Himalayan railway (2′ 0″ gauge)	51·00
(*b*) Darjeeling Himalayan railway extensions (2′ 0″ gauge)	95·44
Total ...	146·44

Darjeeling Himalayan Railway (2′ 0″ gauge)—

Date of registration of the Company.—1879.

Progress in opening—

Sections of railway.	Date of opening.	Miles.	Total.
1	2	3	4
Siliguri to Kurseong	23-8-80	31·75	
Kurseong to Sonada	1-2-81	9·50	
Sonada to Ghum	4-4-81	5·87	
Ghum to Darjeeling	4-7-81	3·63	
Darjeeling to Darjeeling Bazar	16-6-85	0·25	
TOTAL	...	...	51·00

Details of construction—

Permanent-way.—The line is laid throughout with 41½-lb. flat-footed steel rails on wooden sleepers. These are being renewed with a special section steel rail, 41½ lbs. to the yard, as required.

Ballast.—For 9 miles from Siliguri the line has been ballasted with gravel or broken stone, except near Siliguri, where sand has been used. On the hill section, where necessary, broken stone ballast has been put in.

Fencing.—The line is unfenced.

Curves.—The sharpest curve has a radius of 60 feet.

Gradients.—The ruling gradient of the greater part of the line is about 1 in 25; from Sukna to Ghum (summit) and thence to Darjeeling there is a length of about three-fourths of a mile on grades of 1 in 22½ to 1 in 23, uncompensated, with short lengths of 1 in 20.

Contract and agreement—

Contract, dated the 8th April 1879, *between the Secretary of State and the late Mr. Franklin Prestage,* as to the construction, maintenance, management and working of the railway.

Agreement, dated the 24th January 1913, *between the Secretary of State and the Darjeeling-Himalayan Railway Company,* providing for the exclusion from the Company's capital of the preference shares raised for buying up the shares of the Darjeeling-Himalayan Railway Extensions Company for the purposes of clause 16 of the contract of 8th April 1879.

Main provisions of contract and agreement—

(i) *Land.*—Government land, and the right to use the existing cart road, to be granted to the Company free of cost. Other land necessary, if any, to be acquired by the Government and transferred to the Company at cost price.

(ii) *Government aid.*—The Government undertake to pay to the Company any sum required to make up its gross receipts to two lakhs of rupees annually.

(iii) *Distribution of profits.*—After the first five years half the net profits of any year in excess of 5 per cent on the paid up capital to be applied in repayment to the Government of the amount expended on the maintenance of the cart road during the same year, or in making good a deficiency in gross receipts.

(iv) *Rates and fares.*—Certain maxima have been fixed within which the Company is permitted to vary rates and fares.

(v) *Special obligations as to the conveyance of.*—

(*a*) Mails, troops, police, high Government Officials and Government stores.—Mails and Post office servants to be carried by the Company in consideration of a payment by the Government of Rs. 10,260 yearly. [No special provision exists as to troops, police, high Government Officials and Government stores.]

(*b*) Government bullion and coin, and the persons in charge thereof.—None specified.

(vi) *Power of the Government to determine contract.*— } If at any period the railway should not be
(vii) *Power of the Company to surrender contract.*— } worked for six consecutive months, the Company is to surrender the road and land acquired from the Government, receiving any sum due to it for permanent improvements to the road or works connected with it.

After the railway has been opened for 25 years (reckoning from the 4th May 1884), and thereafter at intervals of 10 years, the Government have the power, by giving 12 months' previous notice to terminate the contract and take over the line on payment to the Company of its value as a dividend-earning investment, with an additional bonus of 20 per cent over and above such value.

NOTE.—Government relinquished the right to terminate the contract at the end of the 25th year, and decided to allow the terms and conditions of the contract of the 8th April 1879 to continue for a further period of 10 years, viz., to May 1919 *vide* Railway Board's letter No. 1412 R. T., dated the 1st August 1908, to the Secretary to the Government of Bengal Railway Department.

(viii) *Term of contract.*—None specified.

DARJEELING-HIMALAYAN RAILWAY SYSTEM—*contd.*

Darjeeling Himalayan railway (2′ 0″ gauge)—*concld.*

Statistics of working (Those for the periods prior to 1908 will be found in Appendix 38 to the Railway Administration Report for 1907.)—

Year.	Mileage open at end of each year.	Total capital outlay, including suspense, to end of each year, i.e., outlay on (i) lines open and (ii) lines partly or wholly under construction.	Gross earnings.	Net earnings.	Percentage of net earnings on total capital outlay given in column (3).	Government share of surplus profits.	Total income (column 5—column 7).	Percentage of total income on total capital outlay given in column (3).	Earnings per mile per week.	Proportion of expenses to earnings.
1	2	3	4	5	6	7	8	9	10	11
	Miles.	Rs.	Rs.	Rs.		Rs.	Rs.		Rs.	
1908 .	51·00	37,47,327	9,44,452	4,21,454	11·24	66,162	3,55,292	9·48	356	55·38
1909 .	51·00	37,72,667	9,89,125	4,39,895	11·66	88,395	3,51,500	9·31	376	55·52
1910 .	51·00	37,94,440	10,03,569	4,41,931	11·65	90,653	3,51,278	9·26	378	55·96
1911 .	51·00	38,51,682	10,29,802	4,44,286	11·53	91,435	3,52,801	9·16	388	56·86
1912 .	51·00	39,25,147	11,38,900	5,11,268	13·02	98,475	4,12,793	10·52	429	55·11
1st qr. of 1913.	51·00	39,55,640	2,43,409	87,282	2·21	14,849	72,433	1·83	367	64·15
1913-14	51·00	40,76,057	11,98,789	5,01,315	12·30	1,08,006	3,93,309	9·65	452	58·18
1914-15	51·00	43,01,734	11,35,682	4,69,576	10·91	97,675	3,71,901	8·64	428	58·65
1915-16	51·00	43,62,976	11,89,696	4,99,218	11·44	1,06,612	3,92,606	9·00	449	58·04
1916-17	51·00	44,72,697	13,01 592	4,48,832	10·03	95,565	3,53,267	7·90	491	65·52
1917-18	51·00	46,06,491	12,87,179	4,56,767	9·92	97,089	3,59,678	7·81	485	64·51

Darjeeling Himalayan railway extensions (2′ 0″ gauge)—

Date of registration of the Company.—20th January 1913.

The construction of this line by the Darjeeling-Himalayan Railway Company for the Darjeeling Himalayan Railway Extensions Company was authorised by the Railway Board in their telegram No. 251-R.C., dated the 6th February 1913.

Progress in opening—

Sections of railway.	Date of opening.	Miles.	Total.	Grand total.
1	2	3	4	5
Kissengunge extension—				
Panchanai to Matigara	16-3-14	2·10		
Matigara to Naksalbari	1-2-15	12·15		
Naksalbari to Talabpur	1-5-15	24·25		
Talabpur to Islampur-Aluabari	1-11-14	8·60	...	
Islampur-Aluabari to Kissengunge	15-6-14	19·25		
			66·35	
Teesta Valley extension—				
Siliguri to Sivoke	16-3-14	12·75		
Sivoke to Riyang	1-5-15	11·75		
Riyang to Kalimpong Road	21-9-15	4·59		
			29·09	
TOTAL ...	...	...	...	95·44

Details of construction—

Permanent-way.—The permanent-way consists of 40-lb. British standard section steel rails with small length of older types of 40-lb. rails, laid on sâl sleepers.

Ballast.—The line is ballasted with sand; but broken stone is being laid.

Fencing.—The line is unfenced.

Curves.—The sharpest curve on the Kissengunj extension is of 100 feet radius and that on the Teesta Valley extension, of 80 feet radius.

Gradients.—The steepest gradient is 1 in 100 on the Kissengunge extension and that on the Teesta Valley Extension, 1 in 50.

Contract—

Dated the 25th April 1914, *between the Secretary of State and the Darjeeling Himalayan Railway Extensions Company*, as to the construction, maintenance and working of the Darjeeling Himalayan Railway Extensions by the Company.

DARJEELING-HIMALAYAN RAILWAY SYSTEM—*concld.*

Darjeeling Himalayan railway extensions (2′ 0″ gauge)—*concld.*

Main provisions of contract—

(i) *Land.*—Land in British territory provided free of cost to the Company. The Company is also permitted to make such use of any roads for the purposes of the extensions as the Governments of Bengal and Bihar and Orissa may authorise.

(ii) *Government aid.*—The Government allow to the Company, in respect of each year, by way of rebate, such a sum not exceeding in any year the net earnings of the Eastern Bengal railway, exclusive of earnings derived from the carriage of revenue stores, from traffic originating or terminating on the extensions, as shall, together with the net earnings of the Company or with half the gross earnings after deducting from such half the sum of Rs. 15,000 payable on account of expenses of management, whichever is more, make up an amount equal to interest for the year at a rate of 5 per cent per annum on the actual expenditure charged in the capital account.

(iii) *Terms of working.*—The extensions are worked by the Darjeeling Himalayan Railway company at 50 per cent of their gross earnings.

(iv) *Distribution of profits.*—When the net earnings of the Company shall exceed the minimum amount sufficient to pay a dividend of 5 per cent per annum such excess shall be divided equally between the Secretary of State and the Company.

(v) *Rates and fares.*—The rates and fares for the carriage of goods and passengers shall be such as may from time to time be arranged between the Secretary of State and the Company and the classification of goods thereon shall be in conformity with that from time to time in force on State railways of a similar gauge; provided that the maxima rates and fares for the Kissengunge extension will be double, and the minima rates and fares the same as those permissible on the Eastern Bengal railway; and that the maxima rates and fares for the Teesta Valley extension will be those stated in schedule A attached to the contract, and the minima rates and fares the same as those fixed for the Western Extension of the Bengal Dooars railway.

(vi) *Special obligations as to the conveyance of.*

(*a*) Mails, troops, police, high Government officials and Government stores.
(*b*) Government bullion and coin and the persons in charge thereof.

} The Company shall carry out all such services as are usually performed by state railways of a similar gauge in the same manner and subject to the same regulations and conditions as to rates and otherwise as are for the time being in force on such railways.

(vii) *Power of the Government to determine contract.*—The Government may, by giving "notice of purchase," determine the contract, either on the 31st March 1946 or on the 31st March in the last year of any subsequent period of 10 years, by paying to the Company 25 times the amount of the average of the yearly net earnings (excluding payments on account of rebate) of the Company during the 3 years immediately preceding, but so that the total amount so payable to the Company shall not in any case exceed by more than 20 per cent, or be less than, the total capital expenditure of the Company.

The Government may, by giving "notice of special purchase," determine the contract at any time in the following cases:—

(*a*) when it is considered desirable to alter the gauge of the railway;
(*b*) when it is considered desirable to convert the railway into a line of through communication; and
(*c*) when it is considered desirable to extend the railway (without altering the gauge or making the line part of a through route) and the Company is unable or unwilling to provide funds for such extension.

If the contract be determined by "notice of special purchase" the Government will pay to the Company 25 times the average yearly net earnings during the 3 years preceding the purchase, or 115 per cent of the total capital expenditure, whichever may be the greater.

(viii) *Power of the Company to surrender contract.*—Nil.

(ix) *Term of contract* [*if not determined under* (*vi*)].—None specified.

Statistics of working—

Year.	Mileage open at end of each year.	Total capital outlay, including suspense to end of each year, i.e., outlay on (i) lines open and (ii) lines partly or wholly under construction.	Gross earnings.	Net earnings.	Percentage of net earnings on total capital outlay given in column (3).	Rebate from, (+), or share of surplus profits payable to, (—), the Secy. of State.	Total income.	Percentage of total income on total capital outlay given in column (3).	Earnings per mile per week.	Proportion of expenses to earnings.
1	2	3	4	5	6	7	8	9	10	11
	Miles.	Rs.	Rs.	Rs.		Rs.	Rs.		Rs.	
1913-14 .	14·28	22,92,311	Information not available.			...	...	...	...	...
1914-15 .	53·62	39,97,838								
1915-16 .	95·44	45,66,982	1,61,788	80,894	1·77	+40,780	1,21,674	2·61	65	50·00
1916-17 .	95·44	51,10,296	3,32,929	1,66,464	3·26	+1,04,050	2,70,514	5·29	67	50·00
1917-18 .	95·44	53,77,644	3,71,982	1,85,991	3·46	+97,891	2,83,882	5·28	75	50·00

N.B.—The evenue figures against 1915-16 are for the half-year ending 31st March 1916, as those for the previous half-year were credited to Capital.

GWALIOR LIGHT RAILWAY (2′ 0″ gauge).

Progress in opening—

Sections of railway.	Date of opening.	Miles.	Total.	Grand total.
1	2	3	4	5
Gwalior-Sipri section—				
Gwalior to Sipri	2-12-99	73·81		
			73·81	
Gwalior-Bhind section—				
Gwalior to Bhind	2-12-99	52·33		
			52·33	
Gwalior-Sheopur-Kalan section—				
Gwalior to Jora Alapur	1-1-04	31·34		
Jora Alapur to Sabalgarh	1-12-04	26·05		
Sabalgarh to Birpur	1-11-08	19·55		
Birpur to Sheopur Kalan	15-6-09	46·88		
			123·82	
GRAND TOTAL	...	...	...	249·96

Details of construction—

Permanent-way.—The permanent-way consists of 30-lb. flat-footed steel rails, laid on sâl and steel trough sleepers.

Ballast.—The line is fully ballasted throughout with broken stone, sand and moorum.

Fencing.—The line is not fenced.

Curves.—The sharpest curve in station yards has a radius of 147 feet. The sharpest curve out of stations has a radius of 287 feet.

Gradients.—The ruling gradient is 1 in 40 on the Gwalior-Sipri section, 1 in 80 on the Gwalior-Sheopur Kalan section and 1 in 150 on the Gwalior-Bhind section.

Agreement—
Main provisions of agreement— Nil. The Gwalior Light railway is the property of the Gwalior Durbar by whom it was constructed and is maintained, stocked and worked. The working of the trains and traffic of the line was under the control of the Great Indian Peninsula Railway Company up to the 30th June 1913.

Statistics of working. (Those for the periods prior to 1908 will be found in Appendix 38 to the Railway Administration Report for 1907.)—

Year.	Mileage open at end of each year.	Total capital outlay, including suspense, to end of each year, *i.e.*, outlay on (i) lines open and (ii) lines partly or wholly under construction.	Gross earnings.	Net earnings.	Percentage of net earnings on total capital outlay given in column (3).	Earnings per mile per week.	Proportion of expenses to earnings.
1	2	3	4	5	6	7	8
	Miles.	Rs.	Rs.	Rs.		Rs.	
1908	203·08	66,13,092	2,61,725	99,262	1·50	25	62·07
1909	249·96	68,19,209	2,52,537	85,063	1·25	20	66·32
1910	249·96	68,57,494	3,69,295	1,74,444	2·54	28	52·76
1911	249·96	67,47,029	4,05,871	1,71,420	2·54	31	57·76
1912	249·96	67,67,204	5,13,976	2,27,870	3·37	40	55·67
1st qr. of 1913	249·96	67,71,609	1,42,494	1,00,594	1·49	44	29·40
1913-14	249·96	69,14,991	5,14,113	2,20,130	3·18	39	57·18
1914-15	249·96	72,26,667	5,31,293	2,16,515	3·00	41	59·25
1915-16	249·96	74,68,981	5,85,642	2,55,475	3·42	45	56·38
1916-17	249·96	75,65,823	5,62,685	2,80,991	3·72	43	50·06
1917-18	249·96	75,91,801	6,57,784	3,58,162	4·72	50	45·55

HOWRAH-AMTA LIGHT RAILWAY (2′ 0″ gauge).

Date of registration of the Company.—2nd May 1895.

Running powers—

Foreign line over home line—

Howrah-Sheakhala Light railway, Telkul Ghât to Kadamtala (for passenger and goods trains), 2·00 miles.

Progress in opening—

Sections of railway.	Date of opening.	Miles.	Total.
1	2	3	4
Main line—			
Telkul Ghât (Howrah) to Dumjur	1-7-97	3·20	
Dumjur to Bargachia	2-10-97	5·87	
Bargachia to Maju	4-5-98	5·50	
Maju to Amta	1-6-98	6·62	
			27·19
Champadanga branch—			
Bargachia to Jagatbalabpur	2-10-97	1·50	
Jagatbalabpur to Antpur	1-6-04	8·50	
Antpur to Champadanga	24-8-08	6·68	
			16·68
TOTAL	...	...	43·87

Details of construction—

Permanent-way.—The permanent-way consists of flat-footed steel rails, 25 lbs. to the yard, on gross sleepers of pynkado on the sections from Maju to Amta. The line from Bargachia to Champadanga and Bargachia to Maju is laid with steel rails 30 lbs. to the yard. The remainder of the line is relaid with steel rails 35 lbs. to the yard.

Ballast.—The line is ballasted throughout.

Fencing.—The line is unfenced.

Curves.—The sharpest curve, sanctioned specially for the town of Howrah, has a radius of 144 feet.

Gradients.—The line is practically level throughout.

Agreements and Local Government orders—

Agreement, dated the 12th June 1889, *between the District Board of Howrah and Messrs. Walsh, Lovett and Company on behalf of the Bengal District Road Tramways Company*, as to the grant of a concession to the Company of the right to construct and work a tramway over a portion of the road within the jurisdiction of the Board.

Agreement, dated the 27th September 1889, *between the Municipal Commissioners of Howrah and Messrs. Walsh, Lovett and Company on behalf of the Bengal District Road Tramways Company*, as to the grant of a concession to the Tramways Company of the right to construct and work a tramway over a portion of the road within the jurisdiction of the Commissioners.

Bengal District Road Tramways Company order published under the Bengal Government, Public Works Department, Notification No. 111, dated the 26th March 1895, authorising the construction of a tramway from Howrah to Amta.

Agreement, dated the 3rd May 1897, *between the District Board of Howrah and the Bengal District Road Tramways Company* (*Howrah-Amta*), in amendment of the agreement of 12th June 1889.

Agreement, dated the 16th August 1901 (supplemental to the agreements of 1889 and 1897), *between the District Board of Howrah and the Howrah-Amta Light Railway Company*, as to the construction and working of an extension from Jagatbalabpur to Champadanga.

Howrah-Amta Extension order published under the Bengal Government, Railway Department, Notification No. 75-R., dated the 7th April 1902, authorising the construction of the extension from Jagatbalabpur to Champadanga.

HOWRAH-AMTA LIGHT RAILWAY (2′ 0″ gauge)—*concld.*

Main provisions of agreements and Local Government orders–

(i) *Land.*—Provided at the cost of Company, other than one side of portions of the road between Howrah and Amta the free use of which is authorised for the purpose of laying the line only.

(ii) *Aid by the Local Authorities.*—The District Board of Howrah either exempt the Company from the tax on account of road cess, or exact only a nominal tax for a period of 21 years, with power of renewal. The Municipal Commissioners of Howrah allow the Company free use of so much of the municipal roads as is necessary for the purpose of laying the line, for a period of 20 years from the 27th March 1895; and thereafter levy a track rent of Rs. 2,000 per mile per annum.

The District Board also pay to the Company, by way of interest on the capital expended, such sum of money as may be required to make the net profits of the Company equivalent to a dividend at the rate of 4 per cent per annum, provided that the Board is not involved on this account in a greater liability than Rs. 1,100 per annum per mile constructed and opened with a maximum of Rs. 28,000 per annum.

(iii) *Distribution of profits.*—Surplus profits in excess of 4 per cent, after setting aside such sums as the Directors may decide, upon the capital for the time being of the Company are divisible in equal proportions between the District Board of Howrah and the Company.

(iv) *Rates and fares.*—Certain maximum rates of fares for passengers and tariff of charges for goods have been fixed. Full control over charges of all kinds is reserved to Local Government.

(v) *Special obligations as to the conveyance of—*

(*a*) Mails, troops, police, high Government officials and Government stores.—
(*b*) Government bullion and coin, and the persons in charge thereof.— } Nil.

(vi) *Power of the Local Authority to determine agreement.*—Upon the expiration of 21 years from the date of the Local Government order authorising the construction of the line, or at the end of every 7 years thereafter, the District Board of Howrah, in conjunction with the District Board of Hooghly and the Municipality of Howrah, have by giving 6 months' notice, the right of purchasing the line by paying to the Company its value as a dividend-earning investment, together with a bonus of 20 per cent thereon.

(vii) *Power of the Company to surrender agreement.*—Nil.

(viii) *Term of agreement* [*if not determined under* (vi)].—None specified.

Statistics of working. (Those for the periods prior to 1908 will be found in Appendix 38 to the Railway Administration Report for 1907.)—

Year.	Mileage open at end of each year.	Total capital outlay, including suspense, to end of each year, *i.e.*, outlay on (i) lines open, and (ii) lines partly or wholly under construction.	Gross earnings.	Net earnings.	Percentage of net earnings on total capital outlay given in column (3).	Subsidy from, (+), or share of net profits to, (—), the District Board.	Total income, [column 5, + or —, column 7].	Percentage of total income on total capital outlay given in column (3).	Earnings per mile per week.	Proportion of expenses to earnings.
1	2	3	4	5	6	7	8	9	10	11
	Miles.	Rs.	Rs.	Rs.		Rs.	Rs.		Rs.	
1908 .	43·87	21,57,189	3,98,131	1,96,412	9·10	—38,678	1,57,734	7·31	193	50·67
1909 .	43·87	21,80,794	4,37,024	2,10,668	9·66	—40,935	1,69,733	7·78	191	51·79
1910 .	43·87	22,24,279	4,86,490	2,15,239	9·67	—45,732	1,69,498	7·62	212	55·78
1911	43·87	23,03,904	4,99,121	2,52,728	10·97	—53,751	1,98,977	8·63	219	49·36
1912	43·87	22,94,838	5,59,302	3,05,869	13·33	—66,159	2,39,710	10·44	245	45·38
1st qr. of 1913.	43·87	23,28,366	1,52,598	76,465	3·29	—16,060	60,405	2·60	267	49·80
1913-14 .	43·87	25,61,026	5,94,348	2,68,927	10·50	—47,009	2,21,918	8·66	261	54·75
1914-15	43·87	26,70,799	6,13,106	2,38,783	8·94	—51,593	1,87,190	7·01	269	61·05
1915-16 .	43·87	26,87,496	6,17,537	2,60,185	9·68	—60,144	2,00,041	7·44	271	57·87
1916-17 .	43·87	26,43,718	6,08,612	2,68,431	10·15	—63,055	2,05,376	7·76	266	55·74
1917-18 .	43·87	26,52,602	6,02,385	2,76,099	10·40	—62,863	2,13,236	8·03	264	54·17

HOWRAH-SHEAKHALA LIGHT RAILWAY (2′ 0″ gauge).

Date of registration of the Company.—19th June 1895.

Running powers—

Home line over foreign line :—

Telkul Ghat to Kadamtala, Howrah-Amta Light railway, for passenger and goods trains, 2·00 miles.

Progress in opening—

Sections of railway.	Date of opening.	Miles.	Total.
1	2	3	4
Main line—			
Kadamtala to Chanditala	2-8-97	8·88	
Chanditala to Kistrampur	10-9-97	3·75	
Kistrampur to Sheakhala	7-11-97	4·75	
			17·38
Janai branch—			
Chanditala to Janai.	5-5-98	2·37	2·37
TOTAL	...	...	19·75

Details of construction—

Permanent-way.—The permanent-way consists of flat-footed steel rails, 25 lbs. to the yard, laid on cross sleepers of pynkado, except on 5·50 miles, between Kadamtala and Baluhati, which have been relaid with 30-lb. steel rails and sal sleepers.

Ballast.—The line is ballasted throughout.

Fencing.—The line is unfenced.

Curves.—The sharpest curve is of 144 feet radius at Howrah town.

Gradients.—The line is practically level throughout.

Agreements and Local Government order—

Agreement, dated the 12th June 1889, *between the District Board of Howrah and Messrs. Walsh, Lovett and Company of Calcutta (the Promoters), for and on behalf of the Bengal District Road Tramways Company ;*
Agreement, dated the 16th July 1889, *between the District Board of Hooghly and Messrs. Walsh, Lovett and Company of Calcutta (the Promoters), for and on behalf of the Bengal District Road Tramways Company ;*
Agreement, dated the 27th September 1889, *between the Municipal Commissioners of Howrah and Messrs. Walsh, Lovett and Company of Calcutta (the Promoters), for and on behalf of the Bengal District Road Tramways Company ;*
} as to the grant of a concession of the right to construct, maintain and work the line from Howrah to Sheakhala.

The Bengal District Road Tramways Company order published, under the Bengal Government, Public Works Department, Notification No. 112, dated the 26th March 1895, authorising the construction of the line from Howrah to Sheakhala.

Agreement, dated the 10th January 1898, *between the District Board of Hooghly and the Bengal District Road Tramways Company (Howrah-Sheakhala)*, providing for an increase in the amount of subsidy guaranteed to be paid by the District Board.

Main provisions of agreements and Local Government order—

(i) *Land.*—Provided at the cost of the Company, other than one side of portions of the road between Howrah and Sheakhala, the free use of which is authorised for the purpose of laying the line.

(ii) *Aid by the local authorities.*—The District Board of Howrah, for 21 years, with power of renewal, exempt the company from the tax on account of road cess, or exact only a nominal tax; and the District Board of Hooghly guarantee to make up the net profit of the Company equivalent to a dividend of 4 per cent per annum on the capital actually paid up and expended, subject to a maximum of Rs. 950 per annum per mile of line constructed and open. The Municipal Commissioners of Howrah allow to the Company free use of so much of the Municipal roads as is necessary for the purpose of laying the line, for a period of 20 years from the 27th March 1895 ; and thereafter levy a track rent of Rs. 2,000 per mile per annum.

(iii) *Distribution of profits.*—Surplus profits in excess of 4 per cent, after setting aside such sums as the Directors may decide, upon the capital for the time being of the Company are divisible between the District Board of Hooghly and the Company in proportion of $\frac{1}{3}$rd to the former and $\frac{2}{3}$rds to the latter.

HOWRAH-SHEAKHALA LIGHT RAILWAY (2' 0" gauge)—*concld.*

Main provisions of agreements and Local Government order—*concld.*

(iv) *Rates and fares.*—Certain maximum rates of fares for passengers and tariff of charges for goods have been fixed. Full control over charges of all kinds is reserved to the Local Government.

(v) *Special obligations as to the conveyance of.*—

(*a*) Mails, troops, police, high Government officials and Government stores.—

(*b*) Government bullion and coin, and the persons in charge thereof.— } Not specified.

(vi) *Power of the Local authority to determine agreement.*—The District Board of Howrah or that of Hooghly, each in conjunction with the other and with the Municipal Commissioners of Howrah, have the right of determining the agreement and purchasing the line after 21 years from the date of the Local Government order authorising its construction or at the end of every 7 years thereafter. If purchased by the District Board of Howrah the price will be equal to the value of the whole line, *plus* a bonus of 20 per cent thereon; if purchased by the District Board of Hooghly the price will be the value of the whole line, *plus* a bonus of 15 per cent thereon.

(vii) *Power of the Company to surrender agreement.*—Nil.

(viii) *Term of agreement* [*if not determined under* (vi)].—None specified.

Statistics of working (Those for the periods prior to 1908 will be found in Appendix 38 to the Railway Administration Report for 1907.)—

Year.	Mileage open at end of each year.	Total capital outlay, including suspense, to end of each year, *i.e.*, outlay on (i) lines open and (ii) lines partly or wholly under construction.	Gross earnings.	Net earnings.	Percentage of net earnings on total capital outlay given in column (3).	Subsidy from, (+), or share of net profits to, (−), the District Board.	Total income.	Percentage of total income on total capital outlay given in column (3).	Earnings per mile per week.	Proportion of expenses to earnings.
1	2	3	4	5	6	7	8	9	10	11
	Miles.	Rs.	Rs.	Rs.		Rs.	Rs.		Rs.	
1908 . . .	19·75	6,33,239	1,01,052	34,303	5·42	−2,987	31 316	4·94	89	66·05
1909 . . .	19·75	6,50,458	1,07,476	38,522	5·92	−3,595	34 927	5·37	104	64·16
1910 . . .	19·75	6,56,173	1,19,792	63,350	9·65	−5,032	58 318	8·88	116	47·11
1911 . . .	19·75	6,56,138	1,26,090	62,171	9·48	−4,666	57,505	8·76	123	50·68
1912 . . .	19·75	6,61,685	1,41,087	74,861	11·31	−6,785	68,076	10·28	137	46·93
1st qr. of 1913	19·75	6,68,508	38,100	21,863	3·27	−2,213	19,650	2·94	148	42·62
1913-14 . .	19·75	7,18,108	1,57,837	69,653	9·69	−6,282	63,371	8·82	154	55·87
1914-15 . .	19·75	8,26,846	1,56,062	70,546	8·53	−7,231	63,315	7·66	152	54·78
1915-16 . .	19·75	7,70,777	1,62,490	62,125	8·06	−8,712	53,413	6·93	158	61·76
1916-17 . .	19·75	7,63,657	1,61,042	65,167	8 53	−9,696	55,471	7·26	157	59·53
1917-18 . .	19·75	7,65,974	1,61,947	65,380	8·55	−9,815	55,565	7·27	157	59·62

JAGADHRI LIGHT RAILWAY (2′ 0″ gauge).

Date of registration of the Company.—27th August 1909.

Progress in opening—

Section of railway.	Date of opening.	Miles.	Total.
1	2	3	4
Jagadhri station to Jagadhri town	11-8-11	3·31	3·31

Details of construction—

Permanent-way.—The permanent-way consists of 24-lb. flat-footed steel rails laid on sál and deodar sleepers.

Ballast.—The line is ballasted for about a furlong in one place only; the remainder is being ballasted gradually with broken bricks.

Fencing.—The line is unfenced.

Curves.—The sharpest curve is of 573 feet radius.

Gradients.—The ruling gradient is 1 in 300.

Local Government order—

The Jagadhri Light Railway Company order of 1908, published under the Punjab Government Notification No. 754, dated the 15th December 1909, as to the construction, maintenance and working of a steam tramway from Jagadhri station to Jagadhri city.

Main provisions of Local Government order—

(i) *Land.*—Except the portions of the District Board and provincial roads in the district of Ambala which the line is authorised to cross, all land for the purpose of the undertaking is provided at the cost of capital.

(ii) *Government aid.*—Nil.

(iii) *Distribution of profits.*—The whole of the profits belong to the Company.

(iv) *Rates and fares.*—To be fixed from time to time by the Company with the approval of the Local Government.

(v) *Special obligations as to the conveyance of—*

(*a*) Mails, troops, police, high Government officials and Government stores.— } Not
(*b*) Government bullion and coin.— } specified.

(vi) *Power of the Government to determine contract.*—At the expiry of 21 years after first opening throughout for traffic, or at subsequent intervals of 10 years, the local authority, by giving 12 months' notice, has the right to terminate the contract and purchase the undertaking, with the previous sanction of the Local Government, by paying to the Company 25 times the yearly average net earnings of the line during the 3 years preceding the purchase with a maximum of 120 and minimum of 100 per cent of the cost price.

(vii) *Power of the Company to surrender contract.*—Nil.

(viii) *Term of contract* [*if not determined under* (vi)]—None specified.

Statistics of working—

Year.	Mileage open at end of each year.	Total capital outlay, including suspense, to end of each year, i.e., outlay on (i) lines open and (ii) lines partly or wholly under construction.	Gross earnings.	Net earnings.	Percentage of net earnings on total capital outlay given in column (3).	Earnings per mile per week.	Proportion of expenses to earnings.
1	2	3	4	5	6	7	8
	Miles.	Rs.	Rs.	Rs.		Rs.	
1911	3·31	1,05,600	7,903	503	0·47	89	93·64
1912	3·31	1,11,266	25,038	1,720	1·54	145	93·13
1st qr. of 1913 . .	3·31	1,11,467	6,962	1,497	1·34	160	78·48
1913-14 . . .	3·31	1,14,132	25,231	3,423	2·99	147	86·43
1914-15 . . .	3·31	1,13,636	22,320	2,758	2·42	130	87·63
1915-16 . . .	3·31	1,13,226	22,713	2,156	1·90	132	90·66
1916-17 . . .	3·31	1,12,224	19,598	1,068	0·95	113	94·54
1917-18 . . .	3·31	1,12,224	18,793	1,573	1·40	109	91·74

JORHAT (PROVINCIAL) RAILWAY (2′ 0″ gauge).

This line was originally known as the "Kokila Mookh tramway" or the "Kokila Mookh State railway." Its construction out of the Provincial revenues of Assam, for the convenience of the numerous tea-gardens in the neighbourhood of Jorhat, was approved by the Government of India in their letter No. 621-R. C., dated the 11th August 1882.

Progress in opening—

Sections of railway.	Date of opening.	Miles.	Total.	Grand total.
1	2	3	4	5
Main line—				
Gosaigaon to Jorhat	13-9-83	7·00		
Jorhat to Dhali river	15-12-84	9·50		
Dhali river to Titabar	16-7-87	1·75		
			18·25	
Cold weather line—				
Gosaigaon to Borghop	22-10-01	4·75		
Borghop to a point further down the river	3-12-11	2·50		
			7·25	
Mariani branch—				
Chenimara Junction to Mariani	1-12-86	7·00		
			7·00	
TOTAL	...	...	...	32·50

Details of construction—

Permanent-way.—2·51 miles between Jorhat and Gosaigaon are laid with steel rails, 30 lbs. to the yard. About a mile, between Jorhat and Chenimara, 4·25 miles, between Chenimara and Mariani, 0·75 mile, between Chenimara and Titabar, and 4·00 miles, between Jorhat and Gosaigaon, and one mile between Gosaigaon and River terminus are laid with steel rails, 25 lbs. to the yard. The rest of the line, including the section from Gosaigaon to Borghop and the alternative cold weather section across Gosaigaon channel, is laid with steel rails, 18 lbs. to the yard.

Ballast.—The line is unballasted.

Fencing.—The line is not fenced.

Curves.—The sharpest curve is of 480 feet radius.

Gradients.—The ruling gradient is about 1 in 800, except on the Jorhat-Chenimara section where it is 1 in 400.

Contract—

Nil.—The line is owned and worked by the State.

Statistics of working (Those for the periods prior to 1908 will be found in Appendix 38 to the Railway Administration Report for 1907.)—

Year.	Mileage open at end of each year.	Total capital outlay, including suspense, to end of each year, *i.e.*, outlay on (*i*) lines open and (*ii*) lines partly or wholly under construction.	Gross earnings.	Net earnings.	Percentage of net earnings on total capital outlay given in column (3).	Interest.	Gain or loss to the State *pertaining to each year.*	Earnings per mile per week.	Proportion of expenses to earnings.
1	2	3	4	5	6	7	8	9	10
	Miles.	Rs.	Rs.	Rs.		Rs.	Rs.	Rs.	
1908	31·75	9,29,930	1,01,098	11,258	1·21	31,681	−20,423	62	88·86
1909	31·65	9,52,583	99,533	11,283	1·18	31,748	−20,465	60	88·66
1910	30·00	9,68,204	95,976	7,529	0·78	31,959	−24,430	59	92·16
1911	32·00	9,72,295	1,09,457	31,354	3·22	32,885	−1,531	70	71·35
1912	32·50	9,84,343	1,22,406	33,068	3·36	33,541	−473	79	72·98
1st qr. of 1913.	32·50	10,43,645	30,528	9,824	0·89	10,369	−1,045	78	69·46
1913-14	32·50	10,64,859	1,30,085	39,846	3·74	35,717	+4,129	82	69·36
1914-15	32·50	10,71,745	1,21,520	−6,352	...	37,882	−43,734	78	105·23
1915-16	32·50	10,90,695	1,56,852	54,790	5·04	37,545	+17,245	98	64·97
1916-17	32·50	11,23,755	1,64,905	63,178	5·62	38,499	+26,679	98	61·83
1917-18	32·50	11,12,262	1,42,055	29,438	2·11	38,828	−15,390	85	83·50

KULASEKARAPATNAM-TISSIANVILLAI LIGHT RAILWAY (2' 0" gauge).

This line in the Tinnevelly district was originally constructed for the sole use of the East India Distilleries and Sugar Factories (Limited) of Madras. Its maintenance and use for public traffic were authorised in Madras Government Order No. 1134-L., dated the 19th June 1914.

Progress in opening—

Section of railway.	Date of opening.	Miles.	Total.
1	2	3	4
Kulasekarapatnam to Tissianvillai	18-7-15	18 00	18·00

Details of construction—

Permanent way.—The permanent-way consists of flat-footed steel rails 18 lbs. to the yard between the Factory and Kulasekarapatnam Port and 14 lbs. to the yard, between Kulasekarapatnam Port and Tissianvillai, laid on wooden and corrugated steel sleepers with clip and bolt.

Ballast.—The line is ballasted with sand.

Fencing.—The line is fenced with thorn hedges where it passes through private lands.

Curves.—The sharpest curve has a radius of 80 feet.

Gradients.—The ruling gradient is 1 in 80.

Local Government order—

Madras Government, Local and Municipal Department, order No. 1134-L., dated the 19th June 1914 authorising the East India Distilleries and Sugar Factories (Limited) of Madras to maintain and use for public traffic the tramway line laid by them between Kulasekarapatnam and Tissianvillai in the district of Tinnevelly.

Main provisions of Local Government order—

(i) *Land.*—Private lands taken on lease from the owners and Government land on an annual rental of Rs. 10 per mile.

(ii) *Government aid.*—Nil.

(iii) *Rates and fares.*—Not stipulated in the Government order. But the promoters have, for the present, fixed 3 pies per mile for passengers (one class only), 1 pie per maund per mile for goods in wagon loads, *i.e.*, 4 tons, 1½ pie per maund for goods in less than wagon loads, 1 pie per mile for every 5 seers, or fraction thereof, of parcels, and ½ pie per mile for every 5 seers, or fraction thereof in excess of 2 cubic feet, of luggage allowed free per passenger.

(iv) *Special obligations as to the conveyance of.*—
(*a*) Mails, troops, police, high Government Officials and Government stores—
(*b*) Government bullion and coin and the persons in charge thereof— } *Nil.*

(v) *Power of the Government to determine contract.*—After 50 years from the date of the order, the local authority may purchase the line by paying to the promoters twenty-five times the average annual net earnings of the line for the last 5 completed years previous to the date of purchase subject to a minimum of 100 and a maximum of 125 per cent of the capital outlay.

The Government also may purchase the line for twenty-five times the average net earnings of the previous 3 years, subject to a minimum of 100 and a maximum of 120 per cent of the actual capital outlay, if, at any time, the line be connected with a railway and the proprietors fail to bring the line up to the standard required by the Indian Railways Act.

Statistics of working—

Year.	Mileage open at end of each year.	Total capital outlay including suspense, to end of each year, *i.e.*, outlay on (*i*) lines open and (*ii*) lines partly or wholly under construction.	Gross earnings.	Net earnings.	Percentage of net earnings on total capital outlay given in column (3).	Earnings per mile per week.	Proportion of expenses to earnings.
1	2	3	4	5	6	7	8
	Miles.	Rs.	Rs.	Rs.		Rs.	
1915-16 . .	18·00	2,86,260	17,630	5,141	2·02	19	70·64
1916-17 . .	18·00	2,98,045	79,893	47,150	15·82	85	40·98
1917-18 . .	18·00	3,46,325	32,043	—5,052	...	34	115·76

TARIKERE-NARASIMHARAJAPURA LIGHT RAILWAY (2' 0" gauge).

The construction of this line by the Mysore Durbar, under the provisions of the Mysore Tramways Regulation No. II of 1906, was sanctioned by the Government of India in the Foreign Department letter No. 3225-I.B., dated the 25th September 1913.

Progress in opening—

Sections of railway.	Date of opening.	Miles.	Total	Grand total.
1	2	3	4	5
Tarikere, on the Birur-Shimoga railway, to Lakvalli	15-1-15	11·88		
Lakvalli to Narasimharajapura	15-5-17	14·72		
			26·60	
UNDER CONSTRUCTION OR SANCTIONED FOR CONSTRUCTION				
Tadasa to Hebbe (sanctioned on 27th August 1917)	...	10·00		
			10·00	
GRAND TOTAL	...	...	...	36·60

Details of construction—

Permanent-way.—The permanent-way consists of 24-lb. flat-footed rails laid on wooden sleepers.

Ballast.—The line is packed with gravel ballast.

Fencing.—The line is unfenced throughout.

Curves.—The radius of the sharpest curve is 119 feet.

Gradients.—The ruling gradient is 1 in 50.

Agreement—

Nil. The line is owned and worked by the Mysore Government.

Statistics of working—

Year.	Mileage open at end of each year.	Total capital outlay, including suspense, to end of each year, *i.e.*, outlay on (*i*) lines open and (*ii*) lines partly or wholly under construction.	Gross earnings.	Net earnings.	Percentage of net earnings on total capital outlay given in column (3).	Earnings per mile per week.	Proportion of expenses to earnings.
1	2	3	4	5	6	7	8
	Miles.	Rs.	Rs.	Rs.		Rs.	
1914-15	12·00	2,50,673	Information not available.		...	...	...
1915-16	11·75	2,97,416	7,625	—2,109	...	12	127·66
1916-17	11·88	3,47,437	*925	—3,687	...	3	498·59
1917-18	26·60	5,14,281	17,798	—9,572	...	14	153·78

*The decrease is due to the closing of the line to traffic for a portion of the year.

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